

Automation and Control Your Guide

January 2018



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Harmony control and signaling



Harmony XVU and XVSV signaling solutions



Harmony XVU components for Ø 60 modular tower lights

1 IP 65 light modules (for association)									
Voltage	24 V								
LED unit type	High brightness							Pulse signal	
Color	● Green	● Red	● Orange	● Blue	○ White	● Yellow	Multi-color	Multi-color	
Reference	XVUC23	XVUC24	XVUC25	XVUC26	XVUC27	XVUC28	XVUC29	XVUC29P	
	XVUC43	XVUC44	XVUC45	XVUC46	XVUC47	XVUC48	-	-	
2 IP 54 audible units (for association)									
Voltage	24 V								
Unit type	Buzzer		Sound	Sound with pulse signal					
Color	○ Silver		● Dark gray						
Reference	XVUC9SQ	XVUC9S	XVUC9V	XVUC9VP					
3 IP 65 body units with top cover (for association)									
Voltage	24 VAC/VDC		100...240 VAC						
Color	○ Silver		● Dark gray			○ Silver			
Type	-	-	NPN	PNP	PNP				
Reference	XVUC21BQ	XVUC21B	XVUC21M	XVUC21MP	XVUC21MQP				
Mounting bases for horizontal support (for association)									
Base type	Fixing plates With fixed length aluminum pole 100 mm/3.937 in					400 mm/ 15.748 in		800 mm/ 31.496 in	
						With height adjustment aluminum pole (1)		Direct fixing plates	
Color	○ Silver		● Dark gray			○ Silver		● Dark gray	
Reference	XVUZ02Q	XVUZ02	XVUZ400	XVUZ800	XVUZ05 (2)	XVUZ01Q	XVUZ01 (3)		
	-	-	-	-	-	-	XVUZ03 (4)		
	-	-	-	-	-	-	XVUZ04 (5)		
6 Mounting bases for vertical support (for association)									
Base type	Fixing plates for mounting on vertical support (aluminum pole + metal bracket - IP 42)								
	100 mm		250 mm			400 mm			
Color	● Dark gray		● Dark gray			● Dark gray			
Reference	XVUZ100T		XVUZ250T			XVUZ400T			
Accessories (for association)									
Unit type	Body extender		Flexible mounting unit for use on horizontal or vertical support, IP 55			Fixing accessory for use on vertical support			
Color	○ Silver		● D. gray	● Dark gray		● Black			
Reference	XVUC020Q	XVUC020	XVUZ06 (6)			XVUZ12 (7)			

(1) Pole height adjustable from 210 to 385 mm (2) For use with DC body unit only
 (3) 3-pin mounting (4) 2-pin mounting (5) 4-pin mounting (6) Only compatible with direct fixing plates
 (7) Compatible with all mounting bases for horizontal support except XVUZ01, XVUZ01Q and XVUZ04.

Harmony XVSV complete units



XVSV sound modules								
Size	DIN 72			DIN 96				
Voltage	12 - 24 VDC			12 - 24 VDC			100 - 230 VAC	
Color	● Dark gray		○ White	● Dark gray		○ White	● Dark gray	○ White
Wiring	NPN	PNP	NPN	NPN	PNP	NPN	NPN	NPN
Reference	XVSV7BBN	XVSV7BBP	XVSV7BWN	XVSV9BBN	XVSV9BBP	XVSV9BWN	XVSV9MBN	XVSV9MWN
Wall mounting plate (option)	XVSV2016							

Harmony XB5 Ø 22 plastic pushbuttons



1



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3

1 Pushbuttons with flush push, unmarked

Color	○ White	● Black	● Green	● Red	● Yellow	● Blue
Contact	NO		NC		NO	
Connection	Screw clamp terminals					
Complete product for standard mounting	XB5AA11	XB5AA21	XB5AA31	XB5AA42	XB5AA51	XB5AA61
Standard mounting head	ZB5AA1	ZB5AA2	ZB5AA3	ZB5AA4	ZB5AA5	ZB5AA6
Flush mounting head in diam 30 hole	ZB5FA1	ZB5FA2	ZB5FA3	ZB5FA4	ZB5FA5	ZB5FA6
Body	ZB5AZ101		ZB5AZ102		ZB5AZ101	

2 Booted pushbuttons with flush push, unmarked

Complete product for standard mounting	–	XB5AP21	XB5AP31	XB5AP42	XB5AP51	XB5AP61
Standard mounting head	–	ZB5AP2	ZB5AP3	ZB5AP4	ZB5AP5	ZB5AP6
Body	–	ZB5AZ101		ZB5AZ102	ZB5AZ101	

3 Pushbuttons with flush push, marked

Color	○ White	● Black	● Green	● Red	● Green	● Red
Marking	↑	↓	“I” (white)	“O” (white)	“START” (white)	“STOP” (white)
Contact	NO			NC	NO	NC
Connection	Screw clamp terminals					
Complete product for standard mounting	XB5AA3341	XB5AA3351	XB5AA3311	XB5AA4322	–	–
Standard mounting head	ZB5AA334	ZB5AA335	ZB5AA331	ZB5AA432	ZB5AA433	ZB5AA434
Body	ZB5AZ101			ZB5AZ102	ZB5AZ101	ZB5AZ102



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4 Ø 40 trigger action Emergency stop mushroom head pushbuttons

Color	● Red			
Contact	NO + NC Push-pull	2 NC Turn to release	NO + NC Turn to release	NO + NC Key release
Connection	Screw clamp terminals			
Complete product for standard mounting	XB5AT845	XB5AS8444	XB5AS8445	XB5AS9445
Standard mounting head	ZB5AT84	ZB5AS844		ZB5AS944
Body	ZB5AZ105	ZB5AZ104	ZB5AZ105	

5 Ø 40 mushroom head pushbuttons, spring return

Color	● Black	● Green	● Blue	● Yellow
Contact	NO Push-pull			
Connection	Screw clamp terminals			
Complete product for standard mounting	XB5AC21	–	–	–
Standard mounting head	ZB5AC2	ZB5AC3	ZB5AC6	ZB5AC5
Body	ZB5AZ101			

Harmony XB5 Ø 22 plastic pushbuttons



1



2

1 Pilot lights with integral LED

Color		○ White	● Green	● Red	● Orange	● Blue	● Yellow
Connection		Screw clamp terminals					
Complete product for standard mounting	24 VAC/VDC	XB5AVB1	XB5AVB3	XB5AVB4	XB5AVB5	XB5AVB6	ZBVB8 (1)
	110...120 VAC	XB5AVG1	XB5AVG3	XB5AVG4	XB5AVG5	XB5AVG6	ZBVG8 (1)
	230...240 VAC	XB5AVM1	XB5AVM3	XB5AVM4	XB5AVM5	XB5AVM6	ZBVM8 (1)
Monolithic product for standard mounting	24 VAC/VDC	XB5EVB1	XB5EVB3	XB5EVB4	XB5EVB5	XB5EVB6	XB5EVB8
	110...120 VAC	XB5EVG1	XB5EVG3	XB5EVG4	XB5EVG5	XB5EVG6	XB5EVG8
	230...240 VAC	XB5EVM1	XB5EVM3	XB5EVM4	XB5EVM5	XB5EVM6	XB5EVM8
Flush mounting head in diam 30 hole		ZB5FV013	ZB5FV033	ZB5FV043	ZB5FV053	ZB5FV063	ZB5FV083
Body	24 VAC/VDC	ZB5AVB1	ZB5AVB3	ZB5AVB4	ZB5AVB5	ZB5AVB6	ZBVB8 (2)
	110...120 VAC	ZB5AVG1	ZB5AVG3	ZB5AVG4	ZB5AVG5	ZB5AVG6	ZBVG8 (2)
	230...240 VAC	ZB5AVM1	ZB5AVM3	ZB5AVM4	ZB5AVM5	ZB5AVM6	ZBVM8 (2)

1

2 Illuminated pushbuttons with flush push, with integral LED

Color		○ White	● Green	● Red	● Orange	● Blue	● Yellow
Contact		NO + NC					
Connection		Screw clamp terminals					
Complete product for standard mounting	24 VAC/VDC	XB5AW31B5	XB5AW33B5	XB5AW34B5	XB5AW35B5	XB5AW36B5	ZBVB8 (3)
	110...120 VAC	XB5AW31G5	XB5AW33G5	XB5AW34G5	XB5AW35G5	XB5AW36G5	ZBVG8 (3)
	230...240 VAC	XB5AW31M5	XB5AW33M5	XB5AW34M5	XB5AW35M5	XB5AW36M5	ZBVM8 (3)
Flush mounting head in diam 30 hole		ZB5FW313	ZB5FW333	ZB5FW343	ZB5FW353	ZB5FW363	ZB5FW383
Body	24 VAC/VDC	ZB5AW0B15	ZB5AW0B35	ZB5AW0B45	ZB5AW0B55	ZB5AW0B65	ZBVB8 (4)
	110...120 VAC	ZB5AW0G15	ZB5AW0G35	ZB5AW0G45	ZB5AW0G55	ZB5AW0G65	ZBVG8 (4)
	230...240 VAC	ZB5AW0M15	ZB5AW0M35	ZB5AW0M45	ZB5AW0M55	ZB5AW0M65	ZBVM8 (4)



3



4



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3 Selector switches and key switches

Positions	2 ∨ Stay put	2 ∇ Spring return	2 ∨ Stay put	3 ∨ Stay put	3 ∇ Spring return	
Contact	NO		NO + NC	2 NO		
Connection		Screw clamp terminals				
Complete product for standard mounting	Black handle	XB5AD21	XB5AD41	XB5AD25	XB5AD33	XB5AD53
	Long black handle	XB5AJ21	–	–	XB5AJ33	XB5AJ53
	Key switch (No. 455)	XB5AG21	XB5AG61	–	XB5AG33	–
Flush mounting head in diam 30 hole	Black handle	ZB5FD2	ZB5FD4	ZB5FD2	ZB5FD3	ZB5FD5
	Long black handle	ZB5FJ2	ZB5FJ4	ZB5FJ2	ZB5FJ3	ZB5FJ5
	Key switch (No. 455)	ZB5FG2	ZB5FG6	ZB5FG2	ZB5FG3	ZB5FG5
Body		ZB5AZ101		ZB5AZ105		ZB5AZ103

4 Illuminated selector switches with integral LED and colored handle

Stay put positions	2 ∨	3 ∨					
Color		● Green	● Red	● Orange	● Green	● Red	● Orange
Contact		NO + NC					
Connection		Screw clamp terminals					
Complete product for standard mounting	24 VAC/VDC	XB5AK123B5	XB5AK124B5	XB5AK125B5	XB5AK133B5	XB5AK134B5	XB5AK135B5
	110...120 VAC	XB5AK123G5	XB5AK124G5	XB5AK125G5	XB5AK133G5	XB5AK134G5	XB5AK135G5
	230...240 VAC	XB5AK123M5	XB5AK124M5	XB5AK125M5	XB5AK133M5	XB5AK134M5	XB5AK135M5
Flush mounting head in diam 30 hole		ZB5FK1233	ZB5FK1243	ZB5FK1253	ZB5FK1333	ZB5FK1343	ZB5FK1353
Body	24 VAC/VDC	ZB5AW0B35	ZB5AW0B45	ZB5AW0B55	ZB5AW0B35	ZB5AW0B45	ZB5AW0B55
	110...120 VAC	ZB5AW0G35	ZB5AW0G45	ZB5AW0G55	ZB5AW0G35	ZB5AW0G45	ZB5AW0G55
	230...240 VAC	ZB5AW0M35	ZB5AW0M45	ZB5AW0M55	ZB5AW0M35	ZB5AW0M45	ZB5AW0M55

5 Double and triple-headed pushbuttons

Type	1 flush 1 projecting	2 flush	1 flush 1 projecting	2 flush	2 flush + 1 red central projecting	
Contact	NO + NC		NO + NC with 24V pilot light		2 NO + NC	
Connection		Screw clamp terminals				
Complete product	XB5AL73415	–	XB5AW73731B5	–	XB5AA731327	–
Head	ZB5AL7341	ZB5AA7121	ZB5AW7L3741	ZB5AW7A1721	ZB5AA73132	ZB5AA71124
Body		ZB5AZ105		ZB5AZ105 + ZBVB1		ZB5AZ103 + ZBE102

(1) To get a complete pilot light, this body must be combined with a ZB5AZ009 socket and a ZB5AV083 head (to be ordered separately - see previous page).

(2) Must be combined with ZB5AZ009 socket.

Harmony XB4 and XB5 pushbuttons: other functions



Buzzer

Color		Black	Red illumination	Yellow illumination
Wiring connector		Screw clamp terminals		
Monolithic product	24 VAC/VDC	XB5KSB	XB5KS2B4	XB5KS2B8
	110...120 VAC/VDC	XB5KSG	XB5KS2G4	XB5KS2G8
	230...240 VAC	XB5KSM	XB5KS2M4	XB5KS2M8



USB and RJ45 ports

Description	Panel-mounted USB and RJ45 ports in 22.5 mm hole with notch		Protection covers		
Characteristics	USB interface, type A jack	Ethernet interface, RJ45 jack	Black	Rigid, transparent	Metal
Connection type	USB port 3.0 A-A	RJ45 port Cat. 6	-	-	-
Degree of protection	IP20	IP20	IP65/IP67	IP65/IP67	IP65/IP67/IP69K
Reference	XB5PUSB3	XB5PRJ45	ZBSP1	ZBSP2	ZBSP3





Timers

Description	Panel-mounted timer function with LED status and 1 static output in 22.5 mm hole				
Output type	1 static output				
Time delay type	Type A (delay on energization)				
Time delay range	0.5...10 s	3...60 s	0.5...10 min	3...60 min	
Reference	24 VDC	XB5DTB22	XB5DTB23	XB5DTB24	XB5DTB25
	100...240 VAC 50/60 Hz	XB5DTGM2	XB5DTGM3	XB5DTGM4	XB5DTGM5



3-phase pilot lights with integral LED

Description	Panel-mounted 3-phase voltage indicator pilot lights with 3 LEDs in 30 mm hole		
Connection	Faston connector, 6.3 mm		
Colors	 Red, green, yellow	 3 white LEDs	
Complete product	400 VAC	XB5EV57K4	XB5EV57L4



1 XB4 complete potentiometers

Description	Panel-mounted complete potentiometers in 22.5 mm hole		
Connection	Screw terminals		
Resistance (in kΩ)	1	4.7	10
Reference	XB4BD912R1K	XB4BD912R4K7	XB4BD912R10K
Resistance (in kΩ)	47	100	470
Reference	XB4BD912R47K	XB4BD912R100K	XB4BD912R470K

2 XB5 complete potentiometers

Description	Panel-mounted complete potentiometers in 22.5 mm hole		
Connection	Screw terminals		
Resistance (in kΩ)	1	4.7	10
Reference	XB5AD912R1K	XB5AD912R4K7	XB5AD912R10K
Resistance (in kΩ)	47	100	470
Reference	XB5AD912R47K	XB5AD912R100K	XB5AD912R470K

Accessories for Harmony pushbuttons



1 Contact blocks (for XB4 and XB5 pushbuttons)

Type	Electrical blocks				Body fixing collars for XB4 or XB5	
Contact	NO	NC	NO	NC	-	-
Connection	Screw clamp terminals		Spring clamp terminals		-	-
Sold in lots of	5	5	4	4	10	
Reference	Contact block	ZBE101	ZBE102	ZBE1015	ZBE1025	ZB4BZ009 ZB5AZ009

2 Light blocks with integral LED (for XB4 and XB5 pushbuttons)

Color	○ White	● Green	● Red	● Orange	● Blue	● Yellow		
Connection	Screw clamp terminals							
Reference	Contact block	24 VAC/VDC	ZBVB1	ZBVB3	ZBVB4	ZBVB5	ZBVB6	ZBVB8
		110...120 VAC	ZBVG1	ZBVG3	ZBVG4	ZBVG5	ZBVG6	ZBVG8
		230...240 VAC	ZBVM1	ZBVM3	ZBVM4	ZBVM5	ZBVM6	ZBVM8

3 Legend holders 30 x 40 mm for 8 X 27 mm legends

Ø 60 legends for Emergency stop

White marking/Red or black background					Black marking/Yellow background			
O	ZBY2931	I	ZBY2147	AUTO	ZBY2115	ARRET D'URGENCE	ZBY9120	ZBY9130T (1)
OFF	ZBY2312	ON	ZBY2311	START	ZBY2303	EMERGENCY STOP	ZBY9320	ZBY9330T (1)
Without marking/Red or black background					Without marking/Yellow background			
Red	ZBY2101	Black	ZBY2101				ZBY9121	

4 Transparent boots for pushbuttons (sold in lots of 10)

For pushbuttons	Circular projecting	Circular flush	Circular flush or projecting	Flush, double headed	Triple headed	Flush/projecting double headed
Reference	ZBP0	ZBPA	ZBP0A	ZBA708	ZBA709	ZBA710

Flush mounting kits

For use with	Pushbuttons and pilot lights				Selector switches and illuminated pushbuttons		
Range and appearance	XB4 chromium plated, depth 9.8 mm	XB5 plastic, black depth 9.8 mm	XB5 plastic, black, depth 12.3 mm with 1 or 2-line legend	XB5 plastic, black, depth 12.3 mm	XB5 plastic, black, depth 12.3 mm with 1 or 2-line legend		
Reference	ZB4BZ021	ZB5AZ021	ZB5AZ023	ZB5AZ025	ZB5AZ022	ZB5AZ024	ZB5AZ026

Harmony XAL plastic control stations



6 Control stations with 1 pushbutton, type XALD

Number and type of pushbuttons	1 start or stop			1 start and stop		
Color or type	● Green	● Green	● Red	● Handle	● Key	
Marking	"I" (white)	"START" (white)	"O" (white)	"O-I" (white)	"O-I" (white)	
Contact	NO		NC	NO		
Connection	Screw clamp terminals					
Complete product	Flush pushbutton	XALD102	XALD103	XALD112	-	-
	Projecting pushbutton	-	-	XALD115	-	-
	Selector switch	-	-	-	XALD134	XALD144

7 Control stations with 1 Emergency stop pushbutton, type XALK

Number and type of pushbuttons	1 x Ø 40 trigger action Emergency stop mushroom head pushbutton					
Color	● Red					
Type	Turn to release			Key release		
Contact	NC	2 NC	2 NC + NO	NC	2 NC	2 NC + NO
Connection	Screw clamp terminals					
Complete product	XALK178	XALK178F	XALK178G	XALK188	XALK188F	XALK188G

8 Control stations with pushbuttons, type XALD

Number and type of pushbuttons	2 start and stop flush mounting			2 up/down flush mounting		
Color/Marking	1 "I" green	1 "Start" green	1 pilot light 24 VDC	1 "Up" white		
	1 "O" red	1 "Stop" red	1 "I" green	1 "Down" black	1 "O" red	1 E-stop red
Contact	NO + NC			2 NO	1 "Down" black NO + NC + NO	
Connection	Screw clamp terminals					

Harmony XB7 Ø 22 monolithic pushbuttons



Flush mounting spring return pushbuttons, unmarked

Color	○ White	● Black	● Green	● Red	● Yellow	● Blue
Contact	NO			NO + NC		
Connection	Screw clamp terminals					
Complete product	XB7NA11	XB7NA21	XB7NA31	XB7NA45	XB7NA85	XB7NA65



Flush mounting spring return pushbuttons, marked

Color	○ White	● Black	● Green	● Red	● Green	● Red
Marking	↑	↓	"I" (white)	"O" (white)	"START" (white)	"STOP" (white)
Contact	NO			NC	NO	NC
Connection	Screw clamp terminals					
Complete product	XB7NA11341	XB7NA21343	XB7NA3131	XB7NA4232	XB7NA3133	XB7NA4234



Ø 40 trigger action Emergency stop mushroom head pushbuttons

Color	● Red		
Contact	NO + NC Push-pull	NO + NC Turn to release	2 NC Key release
Connection	Screw clamp terminals		
Complete product	XB7NT845	XB7NS8445	XB7NS9444



Pilot lights with integral LED

Color	● Green	● Red	● Yellow	● Blue	○ Clear	● Orange	
Connection	Screw clamp terminals						
Complete product	24 VAC/VDC	XB7EV03BP	XB7EV04BP	XB7EV05BP	XB7EV06BP	XB7EV07BP	XB7EV08BP
	120 VAC	XB7EV03GP	XB7EV04GP	XB7EV05GP	XB7EV06GP	XB7EV07GP	XB7EV08GP
	230 VAC	XB7EV03MP	XB7EV04MP	XB7EV05MP	XB7EV06MP	XB7EV07MP	XB7EV08MP



Flush mounting illuminated pushbuttons with integral LED

Color	● Green	● Red	● Orange	● Blue	○ Clear	● Yellow	
Contact	NO + NC						
Connection	Screw clamp terminals						
Complete product	24 VAC/VDC	XB7NW33B1	XB7NW34B1	XB7NW35B1	XB7NW36B1	XB7NW37B1	XB7NW38B1
	120 VAC	XB7NW33G1	XB7NW34G1	XB7NW35G1	XB7NW36G1	XB7NW37G1	XB7NW38G1
	230 VAC	XB7NW33M1	XB7NW34M1	XB7NW35M1	XB7NW36M1	XB7NW37M1	XB7NW38M1



Selector switches with black handle

Positions	2 ∨	2 ∨	3 ∨	2 ∨	3 ∨
Type	Stay put			Key withdrawal in LH position	Key withdrawal in centre position
Contact	NO	NO + NC	2 NO	NO	2 NO

Other control components



Harmony XD4 joystick controllers

Number of directions	2	4	2	4
Contact	1 NO per direction			
Position	Stay put		Spring return	
Reference	XD4PA12	XD4PA14	XD4PA22	XD4PA24

Harmony cam switches

Function	Ammeter	Voltmeter	Changeover	ON-OFF switches		Stepping
Thermal current	12 Amps					
Number of poles	6	6	4	1	3	3
Multi-screw fixing	K1F003MLH	K1F027MLH	K1D002ULH	K1A001ALH	K1C003ALH	K1C003QLH
Ø 22 fixing	K1F003MCH	K1F027MCH	K1D002UCH	K1A001ACH	K1C003ACH	K1C003QCH

Harmony XPE foot switches

Material/Color	Plastic black	Plastic yellow	Metal blue	Metal blue	Metal blue	Metal orange
Cover	No	Yes	No		Yes	
Contact	1 NC + 1 NO		2 NC + 2 NO		1 NC + 1 NO	
Without trigger mechanism	XPEA110	XPEY310	XPEM110	XPEM111	XPEM310	XPER310
Trigger mechanism	-	XPEY510	XPEM810	XPEM811	XPEM510	XPER510

Harmony XB4R/XB5R wireless and batteryless pushbuttons

Receiver	Non-programmable + 1 black cap		
Power supply	24 VDC		
Pushbutton	1 plastic	1 metal	1 plastic in handy box
Reference	XB5RFB01	XB4RFA02	XB5RMB03

Harmony XB5S biometric switches

Receiver	Monostable	Bistable
Power supply	24 VDC/PNP output	
Cable 2 m	XB5S2B2L2	XB5S1B2L2
M12 connector	XB5S2B2M12	XB5S1B2M12

Harmony remote control system and pendant control stations for hoisting

Harmony eXLhoist wireless remote control system (control devices)

Motion pushbutton	6		6	6
Auxiliary pushbuttons	1		2	6
LED or display	LED		LED	Display
Emergency stop mushroom head	Yes		Yes	Yes
Reference	ZART8LS		ZART8L	ZART8D
			ZART8D	ZART12D

Harmony eXLhoist wireless remote control system (base stations)

Standard output		10	12	18
Safety output		2	2	2
Inputs		-	-	18
Connection	Cable gland	Pre-wired 1.5 m	Cable gland	Cable gland
Reference	ZARB10WS	ZARB10WSP	ZARB12W	ZARB18W

Harmony XACA pendant control stations for Ø 22 plastic signaling units

Number of pushbuttons	2	3	4	6	8
Type	Pistol grip			Standard	
Color	Yellow			Yellow	
Pushbutton 1: Raise (1)	Yes	Yes	Yes	Yes	Yes
Pushbutton 2: Lower (1)	Yes	Yes	Yes	Yes	Yes
Emergency stop (2)	-	Yes	-	-	-
Pushbutton 3: Left (1)	-	-	Yes	Yes	Yes
Pushbutton 4: Right (1)	-	-	Yes	Yes	Yes
Pushbutton 5: Forward (1)	-	-	-	Yes	Yes
Pushbutton 6: Reverse (1)	-	-	-	Yes	Yes
Pushbutton 7: O (1)	-	-	-	-	Yes
Pushbutton 8: I (1)	-	-	-	-	Yes
Reference	XACA201	XACA2014	XACA471	XACA671	XACA871

Magelis Small and Advanced Panels



Magelis STO and STU Small Panels



Magelis STO touch panels - most compact panels

Screen size		4.3"	
Screen resolution (pixels)		480 x 272	
Touch screen or keypad		Touch screen	
Software		Vijeo XD	
Memory capacity	Application memory	26 MB	
	Backup memory	128 KB	
	Expansion memory	No	
Communication	Ethernet port	No	1 LAN port
	Serial line	RS-232C (9-way terminal block)	RS-232C/RS-485 (RJ45 8-way) No
	USB connection	1 type A host connector + 1 mini-B connector	
Operating temperature		0...50 °C	
Industrial certifications		CE, RCM, EAC, KC, CUL, UL, ATEX Zone 2/22 (1)	
Cut-out (mm) (2)		112.5 x 77.5	
Dimensions (mm)		124.9 x 90.4 x 38.8	
Reference		HMISTO705	HMISTO715 HMISTO735

(1) ATEX Zone 2/22 certification pending.

(2) An accessory adapter is available to fit in monochrome STO cut-out.

2



Magelis STU touch panels - no cut-out required

Screen size		3.5"	5.7"
Screen resolution (pixels)		320 x 240	
Touch screen or keypad		Touch screen	
Software		Vijeo Designer	
Memory capacity	Application memory	32 MB	
	Backup memory	64 KB	
	Expansion memory	No	
Communication	Ethernet port	1 LAN	
	Serial line	RS-232C/RS-485	
	USB connection	1 type A host connector + 1 mini-B connector	
Operating temperature		0...50 °C	
Industrial certifications		CE, C-Tick, CULus, UL class 1 Div 2 T4A or T5, ATEX Zone 2/22, Marine	
Cut-out (mm)		Ø 22	
Dimensions (mm)		98 x 118 x 55	129 x 163 x 56.5
Reference		HMISTU655	HMISTU855

Magelis GTO Optimum Advanced Panels



Magelis GTO advanced panels with standard front and IP 65 degree of protection

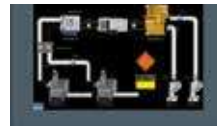
Screen size		3.5"	5.7"	
Screen resolution (pixels)		320 x 240		
Touch screen or keypad		Touch screen + 6 function keys		Touch screen
Software		Vijeo Designer/Vijeo XD		
Memory capacity	Application memory	64 MB/128 MB	96 MB/128 MB	64 MB/128 MB
	Backup memory	128 KB	512 KB	128 KB
	Expansion memory	No		512 KB SD card (1)
Communication	Ethernet port	No	1 LAN port	No 1 LAN port
	Serial line	RS-232C (COM1) and RS-485 (COM2)	RS-232C/485 (COM1)	RS-232C (COM1) and RS-485 (COM2) RS-232C (COM1) and RS-485 (COM2)
	USB connection	1 type A host connector + 1 mini-B connector		
Operating temperature		0...50 °C		
Industrial certifications		CE, RCM, EAC, KC, CULus, UL class 1 Div2, ATEX Zone 2/22, Marine		
Cut-out (mm)		118.5 x 92.5		156 x 123.5
Dimensions (mm)		132 x 106 x 42		169.5 x 137 x 59.5
Reference	With IP 65 degree of protection	HMIGTO1300	HMIGTO1310	HMIGTO2300 HMIGTO2310

2



Magelis GTO advanced panels with standard front and IP 65 degree of protection (continued)

Screen size		7.0"	7.5"	10.4"	12.1"
Screen resolution (pixels)		800 x 480	640 x 480	800 x 600	
Touch screen or keypad		Touch screen + 8 function keys		Touch screen	
Software		Vijeo Designer/Vijeo XD			
Memory capacity	Application memory	96 MB/128 MB			
	Backup memory	128 KB	512 KB		
	Expansion memory	SD card (1)			
Communication	Ethernet port	1 LAN port			
	Serial line	RS-232C (COM1) and RS-485 (COM2)			
	USB connection	1 type A host connector + 1 mini-B connector			
Operating temperature		0...50 °C		0...55 °C	
Industrial certifications		CE, RCM, EAC, KC, CULus, UL class 1 Div2, ATEX Zone 2/22, Marine			
Cut-out (mm)		204.5 x 159.5		259 x 201	301.5 x 227.5
Dimensions (mm)		218 x 173 x 60		272.5 x 214.5 x 57	315 x 241 X 56
Reference	With IP 65 degree of protection	HMIGTO3510	HMIGTO4310	HMIGTO5310	HMIGTO6310



Magelis GTO advanced panels with stainless steel frame and IP 66K degree of protection

Screen size		5.7"	10.4"	12.1"
Screen resolution (pixels)		320 x 240	640 x 480	800 x 600
Touch screen or keypad		Touch screen		
Software		Vijeo Designer/Vijeo XD		
Memory capacity	Application memory	64 MB/128 MB	96 MB/128 MB	
	Backup memory	512 KB		
	Expansion memory	SD card (1)		
Communication	Ethernet port	1 LAN port		
	Serial line	RS-232C (COM1) and RS-485 (COM2)		
	USB connection	1 type A host connector + 1 mini-B connector		
Operating temperature		0...55 °C		
Industrial certifications		CE, RCM, EAC, KC, CULus, UL class 1 Div2, ATEX Zone 2/22		
Cut-out (mm)		195 x 162.5	298 x 240	340.5 x 266.5
Dimensions (mm)		213.5 x 181 x 59.5	316.5 x 258.5 x 57	359 x 285 x 56
Reference	With IP 66K degree of protection	HMIGTO2315	HMIGTO5315	HMIGTO6315

Programming Software and USB Accessories



Vijeo Designer, programming software for Magelis STU small panels and Magelis GTO advanced panels

Compatibility	All Magelis STU small panels and Magelis GTO Optimum advanced panels			
Type of Vijeo Designer license	Single-station Build Time	Multi-station Build Time		
Number of stations	1	3 (team)	10 (group)	Unlimited on 1 site
Type of support	DVD			
License duration	Unlimited			
Reference	VJDSNDTGSV62M	VJDTNDTGSV62M	VJDGNDTGSV62M	VJDFNDTGSV62M



Vijeo XD, programming software for Magelis STO small panels and Magelis GTO advanced panels

Compatibility	All Magelis STO small panels and Magelis GTO Optimum advanced panels (1)			
Type of Vijeo XD license	Vijeo XD DVD (3)	Professional License	Profess. i-License (4)	Express License
Number of stations	1			
Type of support	DVD	Paper	Electronic	Paper
License duration	25 days	Unlimited		
Reference (2)	HMIPEDCZ22	HMIPELCZLSPM●●	HMIPELCZSPA●●	HMIELCZLSPM●●



USB accessories for Magelis STU small panels and Magelis GTO advanced panels

USB accessories (programmable with Vijeo Designer)	Monolithic USB tower lights	Illuminated USB switch	USB keyboard	Biometric USB switch
Degree of protection	IP 54	IP 65		
Description	- 3 multi-color LEDs - clear lens - 2-tone buzzer (up to 85 dB at 1 m) - pre-assembled USB cable for easy connection - USB cable clamp to help ensure firm connection	5 customizable soft/static function keys with multi-color LED backlight or alarm acknowledgment	USB keyboard with 12 keys with integrated LEDs that can be used as user customizable function keys or alphanumeric input keys	- Manages access to HMI data via USB port - Levels of authorization through fingerprint recognition - Traceability of users and operations - Database management from PC
Type of mounting	Base for direct mounting	100 mm aluminum support tube mounted on a plate	-	-
Compatibility with Magelis	HMI GTO	HMI STU, GTO	HMI STU, GTO	HMI GTO
Reference	XVGU3SWV XVGU3SHAV	HMIZRA1	HMIZKB1	XB5S5B2L2

(1) For GTO applications, please check with your local Schneider Electric contact.

(2) The dots at the end of the reference represent the version number.

(3) Vijeo XD DVD contains a trial version of the software, active for 25 days. To obtain the unlimited version, a license needs to be purchased.

(4) Please check the availability of the i-License with your local Schneider Electric contact.

TeSys Universal

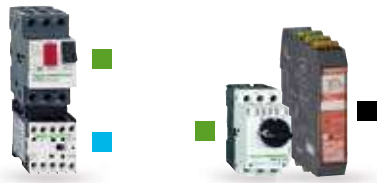
Build your motor starter!

	Contactor	Thermal-magnetic circuit breaker	Magnetic circuit breaker	Switch disconnector fuse	Thermal overload relay	Compact starter controller	Main / Emergency stop switch disconnecter	Fuse carrier	Ultra compact motor starter
Range name	TeSys B, K, D, F	TeSys GV	TeSys GVL	TeSys GS	TeSys K, D, F	TeSys U	TeSys Vario	TeSys DF	TeSys H
Product reference prefix	LC	GV	GVL	GS	LR	LU	V	DF	LZ
Motor starter structure - 4 functions to be covered:									
Disconnection and breaking	■	■	■	■	■	■	■	■	■
Short-circuit protection	■	■	■	■	■	■	■	■	■
Overload protection	■	■	■	■	■	■	■	■	■
Control	■	■	■	■	■	■	■	■	■

Voltage coil code

	■ ■	■ ■	■ ■
	AC	DC	DC < 2.4 W
24 V	B7	BD	BL
48 V	E7	ED	EL
72 V		SD	SL
110 V	F7	FD	
220 V	M7		
230 V	P7		
400 V	V7		

3







Motor power AC3 380/400 V	0.37...0.55 kW	0.75 kW	1.1...1.5 kW	2.2 kW	3 kW	4 kW	5.5 kW
TeSys K mini contactor							
Ie max. AC3 (Ue ≤ 440 V)	6 A	6 A	6 A	6 A	9 A	9 A	12 A
Ie AC1 (T < 60°C)	20 A	20 A	20 A	20 A	20 A	20 A	20 A
Contactor with NO auxiliary contact (*)	LC1K0610 ■■	LC1K0610 ■■	LC1K0610 ■■	LC1K0610 ■■	LC1K0910 ■■	LC1K0910 ■■	LC1K1210 ■■
Contactor with NC auxiliary contact (*)	LC1K0601 ■■	LC1K0601 ■■	LC1K0601 ■■	LC1K0601 ■■	LC1K0901 ■■	LC1K0901 ■■	LC1K1201 ■■
Breaking capacity Icu/400 V	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA
Thermal-magnetic circuit breaker	GV2P06	GV2P07	GV2P08	GV2P10	GV2P14	GV2P14	GV2P16
Rotary handle							
Breaking capacity Icu/400 V	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA	15 KA
Thermal-magnetic circuit breaker	GV2ME06	GV2ME07	GV2ME08	GV2ME10	GV2ME14	GV2ME14	GV2ME16
Pushbutton control							
Breaking capacity Icu/400 V	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA	15 KA
Magnetic circuit breaker	GV2LE06	GV2LE07	GV2LE08	GV2LE10	GV2LE14	GV2LE14	GV2LE16
Tumbler control							
Breaking capacity Icu/400 V	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA
Magnetic circuit breaker	GV2L06	GV2L07	GV2L08	GV2L10	GV2L14	GV2L14	GV2L16
Rotary handle							
Switch disconnector fuse	GS1DD	GS1DD	GS1DD	GS1DD	GS1DD	GS1DD	GS1DD
Fuse type	10 x 38	10 x 38	10 x 38	10 x 38	10 x 38	10 x 38	10 x 38
Operational current Ie/400 V	2 A	4 A	4 A	6 A	8 A	12 A	16 A
Thermal overload relay cI10A	LR2K0306	LR2K0308	LR2K0310	LR2K0312	LR2K0314	LR2K0316	LR2K0321

TeSys H Ultra-compact motor starter					
Breaking capacity Icu/400 V	> 100 KA	> 100 KA	> 100 KA	> 100 KA	> 100 KA
Magnetic circuit breaker	GV2L06	GV2L07	GV2L08	GV2L10	GV2L14
Rotary handle					
Breaking capacity Icu/400 V	> 100 KA	> 100 KA	> 100 KA	> 100 KA	> 100 KA
Magnetic circuit breaker	GV2LE06	GV2LE07	GV2LE08	GV2LE10	GV2LE14
Tumbler control					
Ultra-compact starter					
Standard version	LZ1H2X...	LZ1H2X...	LZ1H6X...	LZ1H6X...	LZ1H6X...
or "safety" version	LZ7H2X...	LZ7H2X...	LZ7H6X...	LZ7H6X...	LZ7H6X...

TeSys Universal

Build your motor starter!

	Contactor	Thermal-magnetic circuit breaker	Magnetic circuit breaker	Switch disconnector fuse	Thermal overload relay	Compact starter controller	Main / Emergency stop switch disconnecter	Fuse carrier	Ultra compact motor starter
Range name	TeSys B, K, D, F	TeSys GV	TeSys GV.L	TeSys GS	TeSys K, D, F	TeSys U	TeSys Vario	TeSys DF	TeSys H
Product reference prefix	LC	GV	GV.L	GS	LR	LU	V	DF	LZ
Motor starter structure - 4 functions to be covered:									
 Disconnection and breaking	■	■	■	■	■	■	■	■	■
 Short-circuit protection	■	■	■	■	■	■	■	■	■
 Overload protection	■	■	■	■	■	■	■	■	■
 Control	■	■	■	■	■	■	■	■	■

Voltage coil code

	■ ■	■ ■	■ ■	■ ■	★ ★
	AC	DC	DC < 2.4 W	AC/DC	AC/DC
24 V	B7	BD	BL	BNE	B/BL
48 V	E7	ED	EL	BNE	ES
72 V		SD	SL	EHE	ES
110 V	F7	FD		KUE	FU
220 V	M7			KUE	FU
230 V	P7			KUE	FU
400 V	V7			USE	

3



Motor power AC3 380/400 V	0,37...0,55 kW	0,75 kW	1,1...1,5 kW	2,2 kW	3 kW	4 kW
TeSys D contactor						
le max. AC3 (Ue ≤ 440 V)	9 A	9 A	9 A	9 A	9 A	9 A
Ie AC1 (T < 60°C)	25 A	25 A	25 A	25 A	25 A	25 A
Contactor (*)	LC1D09 ■■	LC1D09 ■■	LC1D09 ■■	LC1D09 ■■	LC1D09 ■■	LC1D09 ■■
Breaking capacity Icu/400 V	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA
Thermal-magnetic circuit breaker	GV2P06	GV2P07	GV2P08	GV2P10	GV2P14	GV2P14
Rotary handle						
Breaking capacity Icu/400 V	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA
Thermal-magnetic circuit breaker	GV2ME06	GV2ME07	GV2ME08	GV2ME10	GV2ME14	GV2ME14
Pushbutton control						
Breaking capacity Icu/400 V	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA
Magnetic circuit breaker	GV2LE06	GV2LE07	GV2LE08	GV2LE10	GV2LE14	GV2LE14
Tumbler control						
Breaking capacity Icu/400 V	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA
Magnetic circuit breaker	GV2L06	GV2L07	GV2L08	GV2L10	GV2L14	GV2L14
Rotary handle						
Switch disconnector fuse	GS1DD	GS1DD	GS1DD	GS1DD	GS1DD	GS1DD
Fuse type	10 x 38	10 x 38	10 x 38	10 x 38	10 x 38	10 x 38
Operational current Ie/400 V	2 A	4 A	4 A	6 A	8 A	12 A
Thermal overload relay cI10A						
	LRD06	LRD07	LRD08	LRD10	LRD12	LRD14
Thermal overload relay cI20						
	-	-	LRD1508	LRD1510	LRD1512	LRD1514

TeSys U compact motor starter





Breaking capacity Icu/400 V	50 kA	50 kA	50 kA	50 kA	50 kA	50 kA
Power base	LUB12	LUB12	LUB12	LUB12	LUB12	LUB12
Control unit	LUCA1X ★★	LUCA05 ★★	LUCA05 ★★	LUCA12 ★★	LUCA12 ★★	LUCA12 ★★

LAD5C..., LAD9AP3... modules provide pre-wired solutions for GV + LC1D control circuits. Use LUFC00 for TeSys U.

(*) The end of the product references must be replaced by a coil voltage code as indicated above (eg.: "P7" for 230 V AC, "BD" for 24 V DC). For more details, please refer to TeSys catalogue

TeSys Universal

Build your motor starter!

	Contactor	Thermal-magnetic circuit breaker	Magnetic circuit breaker	Switch disconnecter fuse	Thermal overload relay	Compact starter controller	Main / Emergency stop switch disconnecter	Fuse carrier	Ultra compact motor starter
Range name	TeSys B, K, D, F	TeSys GV	TeSys GV.L	TeSys GS	TeSys K, D, F	TeSys U	TeSys Vario	TeSys DF	TeSys H
Product reference prefix	LC	GV	GV.L	GS	LR	LU	V	DF	LZ
Motor starter structure - 4 functions to be covered:									
 Disconnection and breaking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 Short-circuit protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
 Overload protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
 Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Voltage coil code

	■ ■	■ ■	■ ■	■ ■	★ ★
	AC	DC	DC < 2.4 W	AC/DC	AC/DC
24 V	B7	BD	BL	BNE	B/BL
48 V	E7	ED	EL	BNE	ES
72 V		SD	SL	EHE	ES
110 V	F7	FD		KUE	FU
220 V	M7			KUE	FU
230 V	P7			KUE	FU
400 V	V7			USE	





3



Motor power AC3 380/400 V	5.5 kW	7.5 kW	9 kW	11 kW	15 kW
TeSys D contactor					
I _e max. AC3 (U _e ≤ 440 V)	12 A	18 A	25 A	25 A	32 A
I _e AC1 (T < 60°C)	25 A	32 A	40 A	40 A	50 A
Contactor (*)	LC1D12 ■■	LC1D18 ■■	LC1D25 ■■	LC1D25 ■■	LC1D32 ■■
Breaking capacity I _{cu} /400 V	100 KA	100 KA	100 KA	100 KA	100 KA
Thermal-magnetic circuit breaker	GV2P16	GV3P18	GV3P25	GV3P25	GV3P32
Rotary handle					
Breaking capacity I _{cu} /400 V	15 KA	15 KA	15 KA	15 KA	15 KA
Thermal-magnetic circuit breaker	GV2ME16	GV2ME20	GV2ME21	GV2ME22	GV2ME32
Pushbutton control					
Breaking capacity I _{cu} /400 V	15 KA	15 KA	15 KA	15 KA	15 KA
Magnetic circuit breaker	GV2LE16	GV2LE20	GV2LE22	GV2LE22	GV2LE32
Tumbler control					
Breaking capacity I _{cu} /400 V	100 KA	100 KA	100 KA	100 KA	100 KA
Magnetic circuit breaker	GV2L16	GV2L20	GV2L22	GV3L25	GV3L32
Rotary handle					
Switch disconnecter fuse	GS1DD	GS1DD	GS1DD	GS1DD	GS1DD
Fuse type	10 x 38	10 x 38	10 x 38	10 x 38	10 x 38
Operational current I _e /400 V	16 A	16 A	25 A	25 A	32 A
Thermal overload relay cI10A					
	LRD16	LRD21	LRD22	LRD22	LRD32
	-	-	-	LRD325 (1)	LRD332 (1)
Thermal overload relay cI20					
	LRD1516	LRD1521	LRD1522	LRD1522	LRD1532
	-	-	-	LRD325L (1)	LRD332L (1)
TeSys U compact motor starter					
Breaking capacity I _{cu} /400 V	50 KA	50 KA	50 KA	50 KA	50 KA
Power base	LUB12	LUB32	LUB32	LUB32	LUB32
Control unit	LUCA12 ★★	LUCA18 ★★	LUCA32 ★★	LUCA32 ★★	LUCA32 ★★
LAD5C..., LAD9AP3.. modules provide pre-wired solutions for GV + LC1D control circuits. Use LUF00 for TeSys U.					

TeSys Universal

Build your motor starter!

	Contactor	Thermal-magnetic circuit breaker	Magnetic circuit breaker	Switch disconnecter fuse	Thermal overload relay	Compact starter controller	Main / Emergency stop switch disconnecter	Fuse carrier	Ultra compact motor starter
Range name	TeSys B, K, D, F	TeSys GV	TeSys GV.L	TeSys GS	TeSys K, D, F	TeSys U	TeSys Vario	TeSys DF	TeSys H
Product reference prefix	LC	GV	GV.L	GS	LR	LU	V	DF	LZ
Motor starter structure - 4 functions to be covered:									
	Disconnection and breaking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Short-circuit protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Overload protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

3



Voltage coil code





	■ ■	■ ■	■ ■	■ ■	■ ■	● ●	● ●	★ ★	★ ★
	AC	DC	DC < 2.4 W	AC/DC	DC < 0.5 W	AC	DC	AC	DC
24 V	B7	BD	BL	BNE	BBE	B7	BD	B7	BD
48 V	E7	ED	EL	BNE		E7	ED	E7	ED
72 V		SD	SL	EHE			SD		SD
110 V	F7	FD		KUE		F7	FD	F7	FD
220 V	M7			KUE		M7		M7	
230 V	P7			KUE		P7		P7	
400 V	V7			USE		V7		V7	

Motor power AC3 380/400 V	18.5 kW	22 kW	30 kW	37 kW	45 kW	55 kW	75 kW
TeSys D contactor							
Ie max. AC3 (Ue ≤ 440 V)	40 A	50 A	65 A	80 A	95 A	115 A	150 A
Ie AC1 (T < 60°C)	60 A	80 A	80 A	125 A	125 A	200 A	200 A
Contactor (*)	LC1D40A ■■	LC1D50A ■■	LC1D65A ■■	LC1D80A ■■	LC1D95 ●●	LC1D115 ★★	LC1D150 ★★
Breaking capacity Icu/400 V	50 KA	50 KA	50 KA	100 KA	100 KA	100 KA	70 KA
Thermal-magnetic circuit breaker	GV3P40	GV3P50	GV3P65	GV4P80	GV4P115	GV4P115	GV7RS150
		Rotary handle		Rotary or tumbler handle			
Breaking capacity Icu/400 V	50 KA	50 KA	50 KA	50 KA	100 KA	100 KA	35 KA
Thermal-magnetic circuit breaker	GV3P40	GV3P50	GV3P65	GV3P73	GV4P115	GV4P115	GV7RE150
		Rotary handle		Rotary or tumbler handle			
Breaking capacity Icu/400 V	50 KA	50 KA	50 KA	100 KA	100 KA	100 KA	70 KA
Magnetic circuit breaker	GV3L40	GV3L50	GV3L65	GV4L80	GV4L115	GV4L115	NSX160HMA
		Rotary handle		Rotary or tumbler handle			
Breaking capacity Icu/400 V	50 KA	50 KA	50 KA	50 KA	100 KA	100 KA	50 KA
Magnetic circuit breaker	GV3L40	GV3L50	GV3L65	GV3L73	GV4L115	GV4L115	NSX160NMA
		Rotary handle		Rotary or tumbler handle			
Switch disconnecter fuse	GS2F	GS2F	GS2J	GS2J	GS2J	GS2J	GS2J GS2LL
Fuse type	14 x 51	14 x 51	22 x 58	22 x 58	22 x 58	22 x 58	T00
Operational current Ie/400 V	40 A	50 A	80 A	100 A	100 A	125 A	160 A
Thermal overload relay cI10A							
	-	-	-	LRD3361	LRD3365	LRD4367	LRD4369
	LRD340	LRD350	LRD365	-	-	LR9D5369 (1)	LR9D5369 (1)
Thermal overload relay cI20							
	LRD340L	LRD350L	LRD365L	LR2D3563	-	LR9D5569 (1)	LR9D5569 (1)

(*) The end of the product references must be replaced by a coil voltage code as indicated above (eg.: "P7" for 230 V AC, "BD" for 24 V DC). For more details, please refer to TeSys catalogue
 (1) Electronic products

TeSys Universal

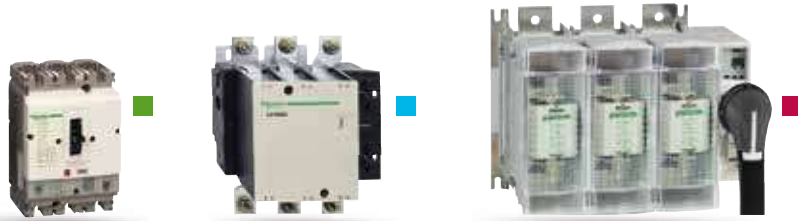
Build your motor starter!

	Contactor	Thermal-magnetic circuit breaker	Magnetic circuit breaker	Switch disconnecter fuse	Thermal overload relay	Compact starter controller	Main / Emergency stop switch disconnecter	Fuse carrier	Ultra compact motor starter
Range name	TeSys B, K, D, F	TeSys GV	TeSys GV.L	TeSys GS	TeSys K, D, F	TeSys U	TeSys Vario	TeSys DF	TeSys H
Product reference prefix	LC	GV	GV.L	GS	LR	LU	V	DF	LZ
Motor starter structure - 4 functions to be covered:									
 Disconnection and breaking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 Short-circuit protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
 Overload protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
 Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Voltage coil code

	■ ■	■ ■	□ □	★ ★	★ ★
	AC	DC	AC/DC	AC	DC
24 V	B7	BD			
48 V	E7	ED			
72 V		SD			
110 V	F7	FD	FW	F7	FD
220 V	M7		MW	M7	MD
230 V	P7		MW	P7	
400 V	V7		QW	V7	

3



Motor power AC3 380/400 V	90 kW	110 kW	132 kW	160 kW	200 kW	250 kW	315 kW	400 kW	560 kW
TeSys F contactor									
le max. AC3 (Ue ≤ 440 V)	185 A	225 A	265 A	330 A	400 A	500 A	630 A	800 A	1000 A
le AC1 (T < 60°C)	275 A	315 A	350 A	400 A	500 A	700 A	1000 A	1000 A	1250 A
Contactor (*)	LC1F185 ■■	LC1F225 ■■	LC1F265 ■■	LC1F330 ■■	LC1F400 ■■	LC1F500 ■■	LC1F630 ■■	LC1F800 □□	LC1F1000 ★★
Breaking capacity Icu/400 V	70 KA	70 KA	70 KA	70 KA	70 KA	70 KA	70 KA	70 KA	70 KA
Thermal-magnetic circuit breaker	GV7RS220	GV7RS220	NSX400H	NSX400H	NSX630H	NSX630H	NS800H	NS800H	NS1000L
	Tumbler control		(1)	(1)	(1)	(1)	Micrologic 5.0	Micrologic 5.0	Micrologic 5.0
Breaking capacity Icu/400 V	35 KA	35 KA	45 KA	45 KA	45 KA	45 KA	50 KA	50 KA	42 KA
Thermal-magnetic circuit breaker	GV7RE220	GV7RE220	NSX400N	NSX400N	NSX630N	NSX630N	NS800N	NS800N	NS1000L
	Tumbler control		(1)	(1)	(1)	(1)	Micrologic 5.0	Micrologic 5.0	Micrologic 5.0
Breaking capacity Icu/400 V	70 KA	70 KA	70 KA	70 KA	70 KA	70 KA	70 KA	70 KA	70 KA
Magnetic circuit breaker	NSX250HMA	NSX250HMA	NSX400H	NSX400H	NSX630H	NSX630H	NS800H	NS800H	NS1000L
	Tumbler control		Micrologic 1.3-M	Micrologic 1.3-M	Micrologic 1.3-M	Micrologic 1.3-M	(2)	(2)	(2)
Breaking capacity Icu/400 V	50 KA	50 KA	50 KA	50 KA	50 KA	50 KA	50 KA	50 KA	42 KA
Magnetic circuit breaker	NSX250NMA	NSX250NMA	NSX400N	NSX400N	NSX630N	NSX630N	NS800N	NS800N	NS1000L
	Tumbler control		Micrologic 1.3-M	Micrologic 1.3-M	Micrologic 1.3-M	Micrologic 1.3-M	(2)	(2)	(2)
Switch disconnecter fuse	GS2N	GS2N	GS2N	GS2QQ	GS2QQ	GS2S	GS2S	GS2V	GS2V
Fuse type	T1	T1	T1	T2	T2	T3	T3	T4	T4
Operational current Ie/400 V	200 A	250 A	315 A	400 A	500 A	500 A	630 A	800 A	1000 A
Thermal overload relay cI10A	-	-	-	-	-	-	LRD10 + current transformer 5A/5VA (3)		
	LR9F5371	LR9F5371	LR9F7375	LR9F7375	LR9F7379	LR9F7379	LR9F7381	-	-
Thermal overload relay cI20	LR9F5571	LR9F5571	LR9F7575	LR9F7575	LR9F7579	LR9F7579	LR9F7579	-	-

(*) The end of the product references must be replaced by a coil voltage code as indicated above (eg.: "P7" for 230 V AC, "BD" for 24 V DC). For more details, please refer to TeSys catalogue





(1) Micrologic 2.3-M or Micrologic 6.3-M for advanced motor protection

(2) Micrologic 5.0 + Plug LR Off

(3) Electromechanical product

TeSys Universal

Build your motor starter!

	Contactor	Thermal-magnetic circuit breaker	Magnetic circuit breaker	Switch disconnector fuse	Thermal overload relay	Compact starter controller	Main / Emergency stop switch disconnector	Fuse carrier	Ultra compact motor starter
Range name	TeSys B, K, D, F	TeSys GV	TeSys GV.L	TeSys GS	TeSys K, D, F	TeSys U	TeSys Vario	TeSys DF	TeSys H
Product reference prefix	LC	GV	GV.L	GS	LR	LU	V	DF	LZ
Motor starter structure - 4 functions to be covered:									
	Disconnection and breaking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Short-circuit protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Overload protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Voltage coil code

	□
	AC 50/400
24 V	
48 V	
72 V	
110 V	F
220 V	M
230 V	M
400 V	V

3



Motor power AC3 380/400 V	400 kW	500 kW	630 kW	800 kW	900 kW
TeSys B contactor (3)					
Ie max. AC3 (Ue ≤ 440 V)	800 A	1000 A	1500 A	1500 A	1800 A
Ie AC1 (T < 60°C)	800 A	1250 A	2000 A	2000 A	2750 A
Contactor (*)	LC1BL33 □	LC1BM33 □	LC1BP33 □	LC1BP33 □	LC1BR33 □
Breaking capacity Icu/400 V	70 KA	70 KA	70 KA	85 KA	85 KA
Thermal-magnetic circuit breaker	NS800H	NS1000H	NS1250H	NS1600H	NS2000H
	Micrologic 5.0	Micrologic 5.0	Micrologic 5.0	Micrologic 5.0	Micrologic 5.0
Breaking capacity Icu/400 V	50 KA	50 KA	50 KA	70 KA	70 KA
Thermal-magnetic circuit breaker	NS800N	NS1000N	NS1250N	NS1600N	NS2000N
	Micrologic 5.0	Micrologic 5.0	Micrologic 5.0	Micrologic 5.0	Micrologic 5.0
Breaking capacity Icu/400 V	70 KA	70 KA	70 KA	85 KA	85 KA
Magnetic circuit breaker	NS800H	NS1000H	NS1250H	NS1600H	NS2000H
	(2)	(2)	(2)	(2)	(2)
Breaking capacity Icu/400 V	50 KA	50 KA	50 KA	70 KA	70 KA
Magnetic circuit breaker	NS800N	NS1000N	NS1250N	NS1600N	NS2000N
	(2)	(2)	(2)	(2)	(2)
Switch disconnector fuse	GS2V	GS2V	GS2V	GS2V	GS2V
Fuse type	T4	T4	T4	T4	T4
Operational current Ie/400 V	800 A	1000 A	1250 A	2 x 800 A	2 x 1000 A





(*) The end of the product references must be replaced by a coil voltage code as indicated above (eg.: "P7" for 230 V AC, "BD" for 24 V DC). For more details, please refer to TeSys catalogue

(2) Micrologic 5.0 + Plug LR Off

(3) For further information, see TeSys B application notes available on www.schneider-electric.com

TeSys Universal

Build your motor starter!

	Contactor	Thermal-magnetic circuit breaker	Magnetic circuit breaker	Switch disconnector fuse	Thermal overload relay	Compact starter controller	Main / Emergency stop switch disconnector	Fuse carrier	Ultra compact motor starter
Range name	TeSys B, K, D, F	TeSys GV	TeSys GV.L	TeSys GS	TeSys K, D, F	TeSys U	TeSys Vario	TeSys DF	TeSys H
Product reference prefix	LC	GV	GV.L	GS	LR	LU	V	DF	LZ
Motor starter structure - 4 functions to be covered:									
	Disconnection and breaking	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Short-circuit protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Overload protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



3

TeSys Mini-Vario for standard applications

Main switch disconnector	Door mounting	Ø 22.5 fixing	VBDN12	VBDN20
		4 screw fixing	–	–
Switch disconnector Emergency stop	Mounting at back of enclosure	Ø 22.5 fixing	VCCDN12	VCCDN20
		4 screw fixing	–	–
	Door mounting	Ø 22.5 fixing	VCDN12	VCDN20
		4 screw fixing	–	–
		Thermal current I _{th} (A)	12	20

TeSys Vario for high performance applications

Main switch disconnector	Door mounting	Ø 22.5 fixing	VBD02	VBD01	VBD0	VBD1	VBD2
		4 screw fixing	VBF02	VBF01	VBF0	VBF1	VBF2
Switch disconnector Emergency stop	Mounting at back of enclosure	Ø 22.5 fixing	VCCD02	VCCD01	VCCD0	VCCD1	VCCD2
		4 screw fixing	VCCF02	VCCF01	VCCF0	VCCF1	VCCF2
	Door mounting	Ø 22.5 fixing	VCD02	VCD01	VCD0	VCD1	VCD2
		4 screw fixing	VCF02	VCF01	VCF0	VCF1	VCF2
		Thermal current I _{th} (A)	12	20	25	32	40

TeSys Vario for high performance applications

Main switch disconnector	Door mounting	Ø 22.5 fixing	–	–	–	–
		4 screw fixing	VBF3	VBF4	VBF5	VBF6
Switch disconnector Emergency stop	Mounting at back of enclosure	Ø 22.5 fixing	–	–	–	–
		4 screw fixing	VCCF3	VCCF4	VCCF5	VCCF6
	Door mounting	Ø 22.5 fixing	–	–	–	–
		4 screw fixing	VCF3	VCF4	VCF5	VCF6
		Thermal current I _{th} (A)	63	80	125	175



TeSys DF fuse carrier

Fuse type		8x32	10x38	14x51	22x58
Fuse carrier	1 pole	DF81	DF101	DF141	DF221
	2 poles	DF82	DF102	DF142	DF222
	3 poles	DF83	DF103	DF143	DF223

Altistart soft starters

Altivar variable speed drives



Altistart 01 soft starters for 0.37 to 15 kW/0.5 to 20 HP motors



1 Altistart 01 soft starters for 0.37 to 11 kW motors and single or 3-phase supply voltage 110...480 V 50/60 Hz (1)

Power for single-phase motor (2)	Under 230 V (kW)	0.37	0.75	1.1	1.5	2.2				
Power for 3-phase motor (2)	Under 110 V (HP)	–	–	0.5	–	1	1.5	2	3	
	Under 230 V (kW)	0.37	0.55	0.75	1.1	1.5	2.2	3	4	5.5
	Under 230 V (HP)	0.5	–	1	1.5	2	3	5	7.5	
	Under 400 V (KW)	1.1	–	2.2	3	4	5.5	7.5	9	11
	Under 460 V (HP)	0.5	1.5	2	3	5	7.5	10	15	
Nominal current I _{cL} (A) (3)		3	6	9	12	25				
Dimensions: W x D x H (mm)		22.5 x 100.4 x 100				45 x 130.7 x 124				
Reference		ATS01N103FT	ATS01N106FT	ATS01N109FT	ATS01N112FT	ATS01N125FT				

2 Altistart 01 soft start/soft stop units for 0.75 to 15 kW motors (4) and 3-phase supply voltage 220...240 V 50/60 Hz (5)

Power for 3-phase motor 220...240 V 50/60 Hz (kW) (2)	0.75/1.1	1.5	2.2/3	4/5.5	7.5					
Power in HP (2)	1/1.5	2	3/-	5/7.5	10					
Nominal current I _{cL} (A) (3)	6	9	12	22	32					
Dimensions: W x D x H (mm)		45 x 130.7 x 124			45 x 130.7 x 154					
Reference		ATS01N206LU	ATS01N209LU	ATS01N212LU	ATS01N222LU	ATS01N232LU				

Altistart 01 soft start/soft stop units for 0.75 to 15 kW motors (4) and 3-phase supply voltage 380...415 V 50/60 Hz (5)

Power for 3-phase motor 380...415 V 50/60 Hz (kW) (2)	1.5/2.2/3	4	5.5	7.5/11	15					
Power in HP (2)	–	–	–	–	–					
Nominal current I _{cL} (A) (3)	6	9	12	22	32					
Dimensions: W x D x H (mm)		45 x 130.7 x 124			45 x 130.7 x 154					
Reference		ATS01N206QN	ATS01N209QN	ATS01N212QN	ATS01N222QN	ATS01N232QN				

Altistart 01 start/soft stop units for 0.75 to 15 kW motors (4) and 3-phase supply voltage 440...480 V 50/60 Hz (5)

Power for 3-phase motor 440...480 V 50/60 Hz (kW) (2)	–	–	–	–	–					
Power in HP (2)	2/3	5	7.5	10/15	20					
Nominal current I _{cL} (A) (3)	6	9	12	22	32					
Dimensions: W x D x H (mm)		45 x 130.7 x 124			45 x 130.7 x 154					
Reference		ATS01N206RT	ATS01N209RT	ATS01N212RT	ATS01N222RT	ATS01N232RT				

(1) Number of possible start-stops/hour: 100 for starting time of 1 s maximum, 20 for starting time of 5 s maximum.

(2) Standard motor power ratings, HP power ratings indicated according to standard UL508. (3) I_{cL} corresponds to the starter rating. (4) Control power supply built into the starter.

(5) Number of possible start-stops/hour: 100 for starting time of 1 s maximum, 20 for starting time of 5 s maximum, 10 for starting time of 10 s maximum.

Altistart 22 soft starters for 3 to 500 HP motors



Altistart 22 soft start/soft stop units for 3-phase power supply voltage 208...600 V and 110 V control power supply

Connection in the motor power supply line

Motor power in HP	208 V	3	7.5	–	15	20	25	30	40
	230 V	5	10	15	20	25	30	40	50
	460 V	10	10	30	40	50	60	75	100
	575 V	15	25	40	50	60	75	100	125
Nominal current I _{cL} (A) (3)		17	32	47	62	75	88	110	140
Number of starts/hour	Without fan	6	6	6	6	6	6	4	4
	With fan (6)	10	10	10	10	10	10	10	10

3 Dimensions: W x D x H (mm)

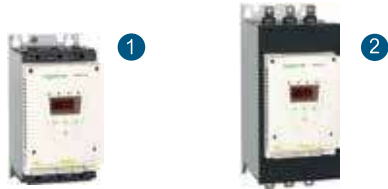
Reference	ATS22D17S6U	ATS22D32S6U	ATS22D47S6U	ATS22D62S6U	ATS22D75S6U	ATS22D88S6U	ATS22C11S6U	ATS22C14S6U
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Motor power in HP	208 V	50	60	75	100	125	150	–
	230 V	60	75	100	125	150	–	200
	460 V	125	150	200	250	300	350	400
	575 V	150	200	250	300	350	400	500
Nominal current I _{cL} (A) (3)		170	210	250	320	410	480	590
Number of starts/hour	Without fan	4	–	–	–	–	–	–
	With fan (6)	10	4	4	4	4	4	4

4 Dimensions: W x D x H (mm)

Reference	ATS22C17S6U	ATS22C21S6U	ATS22C25S6U	ATS22C32S6U	ATS22C41S6U	ATS22C48S6U	ATS22C59S6U
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Altistart 22 soft starters for 4 to 500 kW motors



1 Altistart 22 soft start/soft stop units for 3-phase power supply voltage 230...440 V and 220 V 50-60 Hz control power supply

Connection in the motor power supply line or in the motor delta connection (1)

Motor power in kW (motor power supply line)	230 V	4	7.5	11	15	18.5	22	30	37	
	400 V	7.5	15	22	30	37	45	55	75	
	440 V	7.5	15	22	30	37	45	55	75	
Motor power in kW (motor delta connection) (1)	230 V	5.5	11	18.5	22	30	37	45	55	
	400 V	11	22	45	55	55	75	90	110	
	440 V	15	22	45	55	75	75	90	110	
Nominal current I _{cL} (A) (2)		17	32	47	62	75	88	110	140	
Number of starts/hour	Without fan	6	6	6	6	6	6	4	4	
	With fan (3)	10	10	10	10	10	10	10	10	
Dimensions: W x D x H (mm)		130 x 265 x 169				145 x 295 x 207		150 x 356 x 229		
Reference		ATS22D17Q	ATS22D32Q	ATS22D47Q	ATS22D62Q	ATS22D75Q	ATS22D88Q	ATS22C11Q	ATS22C14Q	

Motor power in kW (motor power supply line)	230 V	45	55	75	90	110	132	160
	400 V	90	110	132	160	220	250	315
	440 V	90	110	132	160	220	250	355
Motor power in kW (motor delta connection) (1)	230 V	75	90	110	132	160	220	250
	400 V	132	160	220	250	315	355	400
	440 V	132	160	220	250	355	400	500
Nominal current I _{cL} (A) (2)		170	210	250	320	410	480	590
Number of starts/hour	Without fan	4	–	–	–	–	–	–
	With fan (3)	10	4	4	4	4	4	4
Dimensions: W x D x H (mm)		150 x 356 x 229	206 X 425 X 299			304 x 455 x 340		
Reference		ATS22C17Q	ATS22C21Q	ATS22C25Q	ATS22C32Q	ATS22C41Q	ATS22C48Q	ATS22C59Q

2 Altistart 22 soft start/soft stop units for 3-phase power supply voltage 230...500 V and 220 V 50-60 Hz control power supply

Connection in the motor power supply line

Motor power in kW	230 V	4	7.5	11	15	18.5	22	30	37	
	400 V	7.5	15	22	30	37	45	55	75	
	440 V	7.5	15	22	30	37	45	55	75	
	500 V	9	18.5	30	37	45	55	75	90	
Nominal current I _{cL} (A) (2)		17	32	47	62	75	88	110	140	
Number of starts/hour	Without fan	–	–	–	–	–	–	–	–	
	With fan (3)	4	4	4	4	4	4	4	4	
Dimensions: W x D x H (mm)		130 x 265 x 169				145 x 295 x 207		150 x 356 x 229		
References		ATS22D17S6	ATS22D32S6	ATS22D47S6	ATS22D62S6	ATS22D75S6	ATS22D88S6	ATS22C11S6	ATS22C14S6	

Motor power in kW	230 V	45	55	75	90	110	132	160	
	400 V	90	110	132	160	220	250	315	
	440 V	90	110	132	160	220	250	355	
	500 V	110	132	160	220	250	315	400	
Nominal current I _{cL} (A) (2)		170	210	250	320	410	480	590	
Number of starts/hour	Without fan	4	–	–	–	–	–	–	
	With fan (3)	10	4	4	4	4	4	4	
Dimensions: W x D x H (mm)		206 X 425 X 299	206 X 425 X 299		304 x 455 x 340		304 x 455 x 340		
Reference		ATS22C17S6	ATS22C21S6	ATS22C25S6	ATS22C32S6	ATS22C41S6	ATS22C48S6	ATS22C59S6	

Note: All values given for Altistart 22 starters are defined for 3.5 x I_n and 20s starting time, with motors with thermal protection class 10. These values are for an ambient temperature of 40 °C.

(1) When connected in the delta configuration, starters allow the use of motors of a larger rating relative to that of the starter. In this configuration, the nominal motor current should not exceed 1.5 I_{cL}.

(2) I_{cL} corresponds to the starter rating.

(3) All soft starters from motor power 55 kW to 160 kW (ATS22C21.. to ATS22C59..) are equipped with a fan as standard.

For soft starters under 55 kW (ATS22D17.. to ATS22C17..), the number of starts per hour can be increased by adding a fan. For more details, please refer to the product datasheets on our website www.schneider-electric.com

Altivar 12 ultra-compact variable speed drives for commercial equipment



Altivar 12 drives with heatsink and single-phase supply voltage: 100...120 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW (3)	0.18	0.37	0.75
	Power indicated on plate in HP (3)	0.25	0.5	1
Altivar 12	Max. continuous output current (3)	1.4	2.4	4.2
	Embedded communication	Modbus Serial Line		
	Application intelligence	Embedded functions		
	Withstand to harsh environment	Up to 60 °C with derating		
Dimensions: W x H x D (mm) (4)	72 x 143 x 102	72 x 143 x 121	105 x 142 x 156	
Reference	ATV12 H018F1 (4)	ATV12 H037F1	ATV12 H075F1	



Altivar 12 drives with heatsink and single-phase supply voltage: 200...240 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW (3)	0.18	0.37	0.55	0.75	1.5	2.2
	Power indicated on plate in HP (3)	0.25	0.55	0.75	1	2	3
Altivar 12	Max. continuous output current (3)	1.4	2.4	3.5	4.2	7.5	10
	Dimensions: W x H x D (mm) (4)	72 x 143 x 102	72 x 143 x 121	72 x 143 x 131		105 x 142 x 156	
Reference	ATV12 H018M2 (4)	ATV12 H037M2	ATV12 H055M2	ATV12 H075M2	ATV12 HU15M2	ATV12 HU22M2	



Altivar 12 drives with heatsink and three-phase supply voltage: 200...240 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW (3)	0.18	0.37	0.75	1.5	2.2	3	4
	Power indicated on plate in HP (3)	0.25	0.55	1	2	3	-	5
Altivar 12	Max. continuous output current (3)	1.4	2.4	4.2	7.5	10	12.2	16.7
	Dimensions: W x H x D (mm) (4)	72 x 143 x 102	72 x 143 x 121	72 x 143 x 131	105 x 143 x 131		140 x 184 x 141	
Reference	ATV12 H018M3 (4)	ATV12 H037M3	ATV12 H075M3	ATV12 HU15M3	ATV12 HU22M3	ATV12 HU30M3	ATV12 HU40M3	



Accessories for Altivar 12 drives

Accessory	Simple Loader configuration tool (5)	Multi-Loader configuration tool (5)	USB/RJ45 cable for PC-drive connection
Compatibility	All Altivar 12 variable speed drives		
Reference	VW3A8120	VW3A8121	TCSMCNAM3M002P

Note: Altivar 12 variable speed drives are designed for 3-phase asynchronous motors.

(1) Min. (U1) and max. (U2) nominal supply voltage: 100 (U1)...120 V (U2), 200 (U1)...240 V (U2).

(2) Altivar 12 variable speed drives are supplied with built-in EMC filters and comply with standard IEC/EN 61800-3. For more information, please refer to the product datasheet on our website www.schneider-electric.com.

(3) These values are given for a nominal switching frequency of 4 kHz, for continuous operation. For derated operation, please refer to the product catalog.

ATV12 variable speed drives can supply transient output current of 1.5 x In for 60 s for every 10 min. cycle.

(4) All dimensions provided are without EMC plate installed.

(5) For more information about this tool, please refer to the product datasheet on our website www.schneider-electric.com.

Altivar Machine ATV320 variable speed drives for simple and advanced machines



ATV320 drives with compact control block and single-phase supply voltage 200...240 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW	0.18	0.37	0.55	0.75	1.1	1.5	2.2
	Power indicated on plate in HP	0.25	0.5	0.75	1	1.5	2	3
Altivar 320	Max. continuous output current (3)	1.5	3.3	3.7	4.8	6.9	8	11
Dimensions: W x H x D (mm) (4)		72 x 143 x 109	72 x 143 x 128	72 x 143 x 138			105 x 142 x 158	
Reference		ATV320 U02M2C	ATV320 U04M2C	ATV320 U06M2C	ATV320 U07M2C	ATV320 U11M2C	ATV320 U15M2C	ATV320 U22M2C

ATV320 drives with compact control block and three-phase supply voltage 380...500 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW	0.37	0.55	0.75	1.1	1.5	2.2	3	4
	Power indicated on plate in HP	0.5	0.75	1	1.5	2	3	4	5
Altivar 320	Max. continuous output current (3)	1.5	1.9	2.3	3	4.1	5.5	7.1	9.5
Dimensions: W x H x D (mm) (4)		105 x 143 x 158						140 x 184 x 158	
Reference		ATV320 U04N4C	ATV320 U06N4C	ATV320 U07N4C	ATV320 U11N4C	ATV320 U15N4C	ATV320 U22N4C	ATV320 U30N4C	ATV320 U40N4C



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ATV320 drives with book control block and single-phase supply voltage 200...240 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW	0.18	0.37	0.55	0.75	1.1	1.5	2.2
	Power indicated on plate in HP	0.25	0.5	0.75	1	1.5	2	3
Altivar 320	Max. continuous output current (3)	1.5	3.3	3.7	4.8	6.9	8	11
Dimensions: W x H x D (mm) (5)		45 x 325 x 245					60 x 325 x 245	
Reference		ATV320 U02M2B	ATV320 U04M2B	ATV320 U06M2B	ATV320 U07M2B	ATV320 U11M2B	ATV320 U15M2B	ATV320 U22M2B

ATV320 drives with book control block and three-phase supply voltage 380...500 V 50/60 Hz (1) (2)

Motor	Power indicated on plate in kW	0.37	0.55	0.75	1.1	1.5	2.2	3	4
	Power indicated on plate in HP	0.5	0.75	1	1.5	2	3	4	5
Altivar 320	Max. continuous output current (3)	1.5	1.9	2.3	3	4.1	5.5	7.1	9.5
Dimensions: W x H x D (mm) (5)		45 x 325 x 245					60 x 325 x 245		
Reference		ATV320 U04N4B	ATV320 U06N4B	ATV320 U07N4B	ATV320 U11N4B	ATV320 U15N4B	ATV320 U22N4B	ATV320 U30N4B	ATV320 U40N4B

Motor	Power indicated on plate in kW	5.5	7.5	11	15
	Power indicated on plate in HP	7.5	10	15	20
Altivar 320	Max. continuous output current (3)	14.3	17	27.7	33
Dimensions: W x H x D (mm) (5)		150 x 232 x 232		180 x 330 x 232	
Reference		ATV320 U55N4B	ATV320 U75N4B	ATV320 D11N4B	ATV320 D15N4B

Note: Altivar Machine ATV320 variable speed drives are designed for 3-phase synchronous and asynchronous motors. ATV320 drives are supplied with braking chop-per as standard. For braking resistor selection, please refer to the product catalog on our website www.schneider-electric.com.

(1) Altivar Machine ATV320 variable speed drives are compliant with Machinery Directive 2006/42/EC. Compliant safety functions are Safe Torque Off (STO), Safe Stop 1 (SS1), Safe Limited Speed (SLS), Safe Maximum Speed (SMS), and Guard Door Lock (GDL).

(2) Altivar Machine ATV320 variable speed drives are supplied with built-in EMC filters and comply with standard IEC/EN 61800-3. For more information, please refer to the product datasheet on our website www.schneider-electric.com.

(3) Altivar Machine ATV320 variable speed drives can supply transient output current of $1.5 \times I_n$ for 60 s for every 10 min. cycle.

(4) For ATV320 drives with compact control block and ATV320 drives with book control > 5.5 kW, EMC plate (or UL type 1 kit) dimensions are not applicable.

(5) For ATV320 drives with book control ≤ 4 kW, EMC plate dimensions are applicable.

For more information, please refer to the "Variable speed drives - Altivar Machine ATV320" catalog on our website www.schneider-electric.com.

Communication modules and accessories for ATV320 variable speed drives



Communication buses and networks

Type of communication module (1)	CANopen daisy chain (2) (3) (4)	CANopen SUB-D9 (2) (3) (4)	CANopen open style (2) (3) (4)
Compatibility	All Altivar Machine ATV320 variable speed drives		
Type of ports	2 RJ45 connectors	1 x 9-way male SUB-D connector	1 x 5-way screw terminal block
Reference	VW3A3608	VW3A3618	VW3A3628

Type of communication module (1)	Modbus TCP and Ethernet/IP network module (3)	PROFIBUS DP V1 communication module (3)	DeviceNet communication module (3)
Compatibility	All Altivar Machine ATV320 variable speed drives		
Type of ports	2 RJ45 connectors	1 x 9-way female SUB-D connector	1 removable 5-way screw connector
Reference	VW3A3616	VW3A3607	VW3A3609

Type of communication module (1)	EtherCat communication module (3)	ProfiNet communication module (3)	Powerlink Communication module
Compatibility	All Altivar Machine ATV320 variable speed drives		
Type of ports	2 RJ45 connectors		
Reference	VW3A3601	VW3A3627	VW3A3619



Accessories

Type of accessory	Communication adapter module (1)		
Compatibility	All Altivar Machine ATV320 variable speed drives with compact control block		
Reference (3)	VW3A3600		

Type of accessory	Simple Loader configuration tool (5)	Multi-Loader configuration tool (5)	USB/RJ45 cable for PC-drive connection
Compatibility	All Altivar Machine ATV320 variable speed drives		
Reference	VW3A8120	VW3A8121	TCSMCNAM3M002P

- (1) Altivar Machine ATV320 products with a compact control block require the VW3A3600 option adapter module in order to use any optional communication module.
 (2) The Modbus serial link always uses the RJ45 communication port. If simultaneous use of the Modbus serial link and the CANopen machine bus is required, a CANopen communication module is needed.
 (3) The Altivar Machine ATV320 drive can only take one communication module.
 (4) When one of the CANopen communication modules is inserted in the Altivar Machine ATV320 drive, CANopen communication via the RJ45 communication port is disabled.
 (5) For more information about this tool, please refer to the product datasheet on our website www.schneider-electric.com.

Zelio automation relays



Zelio Logic smart relays



Compact smart relays and compact "discovery" packs

AC supply voltage	24 VAC		48 VAC	100...240 VAC				
Number of inputs/outputs	12	20	20	10	12	20	20	
Number of discrete inputs	8	12	12	6	8	12	12	
Number of outputs	4 relay	8 relay	8 relay	4 relay	4 relay	8 relay	8 relay	
Clock	Yes	Yes	No	No	Yes	No	Yes	
Compact smart relays	With display	SR2B121B	SR2B201B	SR2A201E	SR2A101FU (1)	SR2B121FU	SR2A201FU (1)	SR2B201FU
	Without display (1)	SR2E121B	SR2E201B	–	SR2D101FU (1)	SR2E121FU	SR2D201FU (1)	SR2E201FU
Compact discovery packs (2)	–	–	–	–	SR2PACKFU	–	SR2PACK2FU	

DC supply voltage	12 VDC			24 VDC			
Number of inputs/outputs	12	20	10	12	20	20	20
Number of discrete inputs	8	12	6	8	12	12	12
including 0-10 V analog inputs	4	6	–	4	2	6	6
Number of outputs	4 relay	8 relay	4 relay	4	8 relay	8	8
Clock	Yes	Yes	No	Yes	No	Yes	Yes
Compact smart relays	With display	SR2B121JD	SR2B201JD	SR2A101BD (1)	SR2B12●BD (3)	SR2A201BD (1)	SR2B20●BD (3)
	Without display	–	–	SR2D101BD (1)	SR2E121BD	SR2D201BD (1)	SR2E201BD
Compact discovery packs (2)	–	–	–	SR2PACKBD	–	SR2PACK2BD	

Modular smart relays (4) with display and modular "discovery" packs

Supply voltage	24 VAC		100...240 VAC		12 VDC	24 VDC	
Number of inputs/outputs	10	26	10	26	26	10	26
Number of discrete inputs	6	16	6	16	16	6	16
including 0-10 V analog inputs	–	–	–	–	6	4	6
Number of outputs	4 relay	10 relay	4 relay	10 relay	10 relay	4	10
Clock	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Modular smart relays	SR3B101B	SR3B261B	SR3B101FU	SR3B261FU	SR3B261JD	SR3B10●BD (5)	SR3B26●BD (5)
Modular discovery packs (2)	–	–	SR3PACKFU	SR3PACK2FU	–	SR3PACKBD	SR3PACK2BD



Extension modules for Zelio Logic SR3B●●●●●● (6)

Type of module	Communication modules (4)		Discrete I/O modules (5)			Analog I/O modules
Network type	Modbus	Ethernet	–			–
Number of inputs/outputs	–	–	6	10	14	4
Number of discrete inputs	–	–	4	6	8	2 (0...10 V, 0...20 mA, PT100)
Number of outputs	–	–	2 relay	4 relay	6 relay	2 (0...10 V)
References	24 VAC	–	SR3XT61B	SR3XT101B	SR3XT141B	–
	100...240 VAC	–	SR3XT61FU	SR3XT101FU	SR3XT141FU	–
	12 VDC	–	SR3XT61JD	SR3XT101JD	SR3XT141JD	–
	24 VDC	SR3MBU01BD	SR3NET01BD	SR3XT61BD	SR3XT101BD	SR3XT141BD

Zelio Logic Alarm software and modems

Type of device	Zelio Logic Alarm management software	Modem (7)
Supply voltage	–	12...24 VDC
Description	–	GSM/2G Modem
References	SR2SFT02	SR2MOD02

Zelio Soft 2 software and accessories

Type of device	Zelio Soft multilingual programming software (6)	Connecting cables	Wireless connection	Back-up memory	
Description	PC CD-ROM (8)	Serial PC/ Smart relay	Bluetooth interface	EEPROM	
References	SR2SFT01	SR2CBL01	SR2USB01	SR2BTC01	SR2MEM02

(1) Programming on smart relay in LADDER language only.

(2) The packs are composed of one smart relay with display and relay output, one SR2SFT01 Zelio soft 2 software, and one SR2USB01 connecting cable.

(3) Replace the ● with the number 1 to order a smart relay with relay output or with 2 for a smart relay with transistor output (Example: SR2B121BD).

(4) The modular base can be equipped with one I/O extension module. The 24 VDC modular base can be equipped with one communication module and/or one I/O extension module.

(5) Replace the ● with the number 1 to order a smart relay with relay output or with 2 for a smart relay with transistor output (Example: SR3B101BD).

(6) The power supply of the extension modules is provided via the Zelio Logic modular relays.

(7) Must be used in conjunction with communication interface SR2COM01.

Zelio Relay RXG and RSL electromechanical relays



RXG interface relays

Type		RXG relays without test button				RXG relays with test button			
Contact		1 CO		2 CO		1 CO		2 CO	
Current		10 A		5 A		10 A		5 A	
Connection		Flat pins (Faston type)				Flat pins (Faston type)			
LED display		Without LED	With LED	Without LED	With LED	Without LED	With LED	Without LED	With LED
Complete product	6 VDC	RXG15RD	RXG13RD	RXG25RD	RXG23RD	RXG11RD	RXG12RD	RXG21RD	RXG22RD
	12 VDC	RXG15JD	RXG13JD	RXG25JD	RXG23JD	RXG11JD	RXG12JD	RXG21JD	RXG22JD
	24 VDC	RXG15BD	RXG13BD	RXG25BD	RXG23BD	RXG11BD	RXG12BD	RXG21BD	RXG22BD
	48 VDC	RXG15ED	RXG13ED	RXG25ED	RXG23ED	RXG11ED	RXG12ED	RXG21ED	RXG22ED
	60 VDC	RXG15ND	RXG13ND	RXG25ND	RXG23ND	RXG11ND	RXG12ND	RXG21ND	RXG22ND
	110 VDC	RXG15FD	RXG13FD	RXG25FD	RXG23FD	RXG11FD	RXG12FD	RXG21FD	RXG22FD
	24 VAC	RXG15B7	RXG13B7	RXG25B7	RXG23B7	RXG11B7	RXG12B7	RXG21B7	RXG22B7
	48 VAC	RXG15E7	RXG13E7	RXG25E7	RXG23E7	RXG11E7	RXG12E7	RXG21E7	RXG22E7
	120 VAC	RXG15F7	RXG13F7	RXG25F7	RXG23F7	RXG11F7	RXG12F7	RXG21F7	RXG22F7
	220 VAC	RXG15M7	RXG13M7	RXG25M7	RXG23M7	RXG11M7	RXG12M7	RXG21M7	RXG22M7
230 VAC	RXG15P7	RXG13P7	RXG25P7	RXG23P7	RXG11P7	RXG12P7	RXG21P7	RXG22P7	
Screw connector socket		RGZE1S35M		RGZE1S48M		RGZE1S35M		RGZE1S48M	

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RSL interface relays

Type		RSL relays		Sockets for RSL relays		Pre-assembled relays/sockets	
Contact		1 CO		-		1 CO	
Current		6 A - standard	6 A - low level	-		6 A	
Connection		PCB pins		Screw connector	Spring terminal	Screw connector	Spring terminal
LED display		Without LED		-		With LED	
Complete product	12 VAC/VDC	RSL1AB4JD	RSL1GB4JD	RSLZVA1	RSLZRA1	RSL1PVJU	RSL1PRJU
	24 VAC/VDC	RSL1AB4BD	RSL1GB4BD	RSLZVA1	RSLZRA1	RSL1PVBU	RSL1PRBU
	48 VAC/VDC	RSL1AB4ED	RSL1GB4ED	RSLZVA2	RSLZRA2	RSL1PVEU	RSL1PREU
	60 VAC/VDC	RSL1AB4ND	RSL1GB4ND	RSLZVA2	RSLZRA2	-	-
	110 VAC/VDC	-	-	-	-	RSL1PVFU	RSL1PRFU
	230 VAC/VDC	-	-	-	-	RSL1PVPU	RSL1PRPU

Zelio Relay RXM, RPM, and RPF electromechanical relays



RXM●AB miniature relays							
Type	RXM●AB relays with test button						
Contact	2 CO		3 CO		4 CO		
Current	12 A		10 A		6 A		
Connection	Flat pins (Faston type)						
LED display	Without LED	With LED	Without LED	With LED	Without LED	With LED	
Complete product	12 VDC	RXM2AB1JD	RXM2AB2JD	RXM3AB1JD	RXM3AB2JD	RXM4AB1JD	RXM4AB2JD
	24 VDC	RXM2AB1BD	RXM2AB2BD	RXM3AB1BD	RXM3AB2BD	RXM4AB1BD	RXM4AB2BD
	48 VDC	RXM2AB1ED	RXM2AB2ED	RXM3AB1ED	RXM3AB2ED	RXM4AB1ED	RXM4AB2ED
	110 VDC	RXM2AB1FD	RXM2AB2FD	RXM3AB1FD	RXM3AB2FD	RXM4AB1FD	RXM4AB2FD
	24 VAC	RXM2AB1B7	RXM2AB2B7	RXM3AB1B7	RXM3AB2B7	RXM4AB1B7	RXM4AB2B7
	48 VAC	RXM2AB1E7	RXM2AB2E7	RXM3AB1E7	RXM3AB2E7	RXM4AB1E7	RXM4AB2E7
	120 VAC	RXM2AB1F7	RXM2AB2F7	RXM3AB1F7	RXM3AB2F7	RXM4AB1F7	RXM4AB2F7
	230 VAC	RXM2AB1P7	RXM2AB2P7	RXM3AB1P7	RXM3AB2P7	RXM4AB1P7	RXM4AB2P7
	220 VDC	-				RXM4AB1MD	-
	240 VDC	-				RXM4AB1U7	-
Screw clamp socket (1)	RXZE2M114		-		RXZE2M114		
Screw connector socket (2)	RXZE2M114M		-		RXZE2M114M		
Screw connector socket (2)	RXZE2S108M		RXZE2S111M		RXZE2S114M		

(1) With mixed contacts (2) With separate contacts



1 RPM power relays (15 A)									
Type	RPM relays with test button								
Contact	1 CO		2 CO		3 CO		4 CO		
Current	15 A								
Connection	Flat pins (Faston type)								
LED display	Without LED	With LED	Without LED	With LED	Without LED	With LED	Without LED	With LED	
Complete product	12 VDC	RPM11JD	RPM12JD	RPM21JD	RPM22JD	RPM31JD	RPM32JD	RPM41JD	RPM42JD
	24 VDC	RPM11BD	RPM12BD	RPM21BD	RPM22BD	RPM31BD	RPM32BD	RPM41BD	RPM42BD
	48 VDC	RPM11ED	RPM12ED	RPM21ED	RPM22ED	RPM31ED	RPM32ED	RPM41ED	RPM42ED
	110 VDC	RPM11FD	RPM12FD	RPM21FD	RPM22FD	RPM31FD	RPM32FD	RPM41FD	RPM42FD
	24 VAC	RPM11B7	RPM12B7	RPM21B7	RPM22B7	RPM31B7	RPM32B7	RPM41B7	RPM42B7
	48 VAC	RPM11E7	RPM12E7	RPM21E7	RPM22E7	RPM31E7	RPM32E7	RPM41E7	RPM42E7
	120 VAC	RPM11F7	RPM12F7	RPM21F7	RPM22F7	RPM31F7	RPM32F7	RPM41F7	RPM42F7
	230 VAC	RPM11P7	RPM12P7	RPM21P7	RPM22P7	RPM31P7	RPM32P7	RPM41P7	RPM42P7
Screw connector socket	RPZF1		RPZF2		RPZF3		RPZF4		

Zelio Relay SSL solid state relays



SSL1 slim interface solid state relays (DC switching)

Type	SSL1 relays (6 mm)		Screw connector sockets	Spring terminal sockets	
Contact	1 NO		–	–	
Switching type	DC switching		–	–	
Load current	0.1 A	3.5 A	–	–	
Load voltage	1...48 VDC	1...24 VDC	–	–	
Complete product	3...12 VDC	SSL1D101JD	SSL1D03JD	SSLZVA1	SSLZRA1
	24 VDC	SSL1D101BD	SSL1D03BD	SSLZVA1	SSLZRA1
	60 VDC	SSL1D101ND	SSL1D03ND	SSLZVA2	SSLZRA2

SSL1 slim interface solid state relays (random switching)

Type	SSL1 relays (6 mm)		Screw connector sockets	Spring terminal sockets
Contact	1 NO		–	–
Switching type	Random switching		–	–
Load current	2 A		–	–
Load voltage	24...280 VAC		–	–
Complete product	3...12 VDC	SSL1A12JDR	SSLZVA1	SSLZRA1
	24 VDC	SSL1A12BDR	SSLZVA1	SSLZRA1
	60 VDC	SSL1A12NDR	SSLZVA2	SSLZRA2
	110 VAC/VDC	SSL1A12NDR	SSLZVA3	SSLZRA3
	230 VAC/VDC	SSL1A12NDR	SSLZVA4	SSLZRA4

SSL1 slim interface solid state relays (zero voltage switching)

Type	SSL1 relays (6 mm)		Screw connector sockets	Spring terminal sockets
Contact	1 NO		–	–
Switching type	Zero voltage switching		–	–
Load current	2 A		–	–
Load voltage	24...280 VAC		–	–
Complete product	3...12 VDC	SSL1A12JD	SSLZVA1	SSLZRA1
	24 VDC	SSL1A12BD	SSLZVA1	SSLZRA1
	60 VDC	SSL1A12ND	SSLZVA2	SSLZRA2
	110 VAC/VDC	SSL1A12ND	SSLZVA3	SSLZRA3
	230 VAC/VDC	SSL1A12ND	SSLZVA4	SSLZRA4

Zelio Relay SSM and SSP solid state relays



1 SSM modular DIN rail solid state relays (DC switching)

Contact	1 NO			
Switching type	DC switching			
Load current	6 A		12 A	
Load voltage	1...60 VDC	1...100 VDC	1...60 VDC	1...100 VDC
Frontal width	12 mm		18 mm	
Complete product	4...32 VDC	SSM1D26BD	SSM1D36BD	SSM1D212BD SSM1D312BD

2 SSM modular DIN rail solid state relays (random switching)

Contact	1 NO			2 NO		
Switching type	Random switching					
Load current	6 A		12 A		6 A	
Load voltage	24...280 VAC	48...600 VAC	24...280 VAC	48...600 VAC	24...280 VAC	48...600 VAC
Frontal width	12 mm			18 mm		
Complete product	4...32 VDC	SSM1A16BDR	SSM1A36BDR	SSM1A112BDR	SSM1A312BDR	SSM2A16BDR SSM2A36BDR
	18...36 VAC	SSM1A16B7R	-	SSM1A112B7R	SSM1A312B7R	-
	90...140 VAC	SSM1A16F7R	-	SSM1A112F7R	SSM1A312F7R	-
	200...265 VAC	SSM1A16P7R	-	SSM1A112P7R	SSM1A312P7R	-

3 SSM modular DIN rail solid state relays (zero voltage switching)

Contact	1 NO			2 NO		
Switching type	Zero voltage switching					
Load current	6 A		12 A		6 A	
Load voltage	24...280 VAC	48...600 VAC	24...280 VAC	48...600 VAC	24...280 VAC	48...600 VAC
Frontal width	12 mm			18 mm		
Complete product	4...32 VDC	SSM1A16BD	SSM1A36BD	SSM1A112BD	SSM1A312BD	SSM2A16BD SSM2A36BD
	90...140 VAC	SSM1A16F7	-	SSM1A112F7	SSM1A312F7	-
	200...265 VAC	SSM1A16P7	-	SSM1A112P7	SSM1A312P7	-



4 SSP1 1-phase panel mount solid state relays (DC switching)

Contact	1 NO		
Switching type	DC switching		
Load current (1)	12 A	25 A	40 A
Load voltage	3...150 VDC		
Complete product	3...12 VDC	SSP1D412BDT	SSP1D425BDT SSP1D440BDT

5 SSP1 1-phase panel mount solid state relays (zero voltage switching)

Contact	1 NO							
Switching type	Zero voltage switching							
Load current (1)	10 A	25 A	50 A	50 A	75 A	75 A	90 A	125 A
Load voltage	24...300 VAC	24...300 VAC	24...300 VAC	48...660 VAC	24...300 VAC	48...660 VAC	48...660 VAC	48...660 VAC
Complete product	4...32 VDC	SSP1A110BDT	SSP1A125BDT	SSP1A150BDT	SSP1A450BDT	SSP1A175BDT	SSP1A475BDT	SSP1A490BDT SSP1A4125BDT
	90...280 VAC	SSP1A110M7T	SSP1A125M7T	SSP1A150M7T	SSP1A450M7T	SSP1A175M7T	SSP1A475M7T	SSP1A490M7T SSP1A4125M7T

6 SSP3 3-phase panel mount solid state relays (random and zero voltage switching)

Contact	3 NO			
Switching type	Random switching		Zero voltage switching	
Load current (1)	25 A		50 A	
Load voltage	48...530 VAC			
Complete product	4...32 VDC	SSP3A225BDRT	SSP3A250BDRT	SSP3A225BDT SSP3A250BDT
	18...36 VAC	SSP3A225B7RT	SSP3A250B7RT	SSP3A225B7T SSP3A250B7T
	90...140 VAC	SSP3A225F7RT	SSP3A250F7RT	SSP3A225F7T SSP3A250F7T
	180...280 VAC	SSP3A225P7RT	SSP3A250P7RT	SSP3A225P7T SSP3A250P7T

(1) Please use correct heatsink for desired load current; see performance curves in product datasheets available on our website www.schneider-electric.com for selection.

Zelio Control RM17, RM22, and RM35 control relays



1 3 Phase Multifunction monitoring relays for DIN rail mounting

Phase loss and sequence	Yes	Yes
Asymmetry	Yes	
Undervoltage	–	Yes
> U > window mode	Yes	
Measuring range	183...528 VAC	183...528 VAC
Output contacts/Current	1 CO/5 A	1 CO/5 A
Power supply	Self-powered	
Frontal width	17.5 mm	
Complete product	RM10TE00	RM10TG00

2 3-phase monitoring relays for DIN rail mounting

Phase loss and sequence	Yes							
Asymmetry	–	Yes	–	Yes	–	Yes	–	
Undervoltage	–		Yes		–			
> U > window mode	–		–		Yes			
Measuring range	183...528 VAC	183...484 VAC	183...528 VAC	183...528 VAC	160...288 VAC	183...528 VAC	304...576 VAC	
Output contacts/Current	1 CO/5 A	2 CO/5 A	1 CO/5 A		2 CO/8 A	1 CO/5 A	2 CO/8 A	
Power supply	Self-powered							
Frontal width	17.5 mm				22.5 mm	17.5 mm	22.5 mm	
Complete product	RM17TG00	RM17TG20	RM17TA00	RM17TU00	RM22TU21	RM17TE00	RM22TR33	

3 3-phase voltage monitoring relays for DIN rail mounting

Detected loss of one or more phases	Yes		
Absence of neutral	–	Yes	–
Oversvoltage and undervoltage	Yes		
Measuring range	183...528 VAC	114...329 VAC	194...528 VAC
Output contacts/Current	1 CO/5 A	1 CO/5A for > U threshold + 1 CO/5A for < U threshold	
Power supply	Self-powered		
Frontal width	17.5 mm	35 mm	
Complete product	RM17UB310	RM35UB3N30	RM35UB330

4 Phase or DC voltage monitoring relays for DIN rail mounting

> U > window mode	Yes						
Oversvoltage	Yes						–
Undervoltage	Yes						
Measuring range	20...80 VAC/VDC	65...260 VAC/VDC	0.05...5 VAC/VDC	1...100 VAC/VDC	15...500 VAC/VDC	15...500 VAC/VDC	80...300 VAC/VDC
Output contacts/Current	1 CO/5 A			2 CO/8 A			
Power supply	Self-powered			24...240 VAC		380...415 VAC	110...240 VAC
Frontal width	17.5 mm			22.5 mm			
Complete product	RM17UBE15	RM17UBE16	RM22UA31MR	RM22UA32MR	RM22UA33MR	RM22UA33MT	RM22UB34



5 Current monitoring relays for DIN rail mounting

Monitoring characteristics	Overcurrent	> I > window mode with/without memory					
Integrated current transformer	Yes	–					
Measuring range	2...20 A	4...1,000 mA	2...500 mA	0.15...15 A			
Output contacts/Current	1 CO/5 A	2 CO/8 A	2 CO/5 A		2 CO/8 A		
Power supply	24...240 VAC/VDC					380...415 VAC	
Frontal width	17.5 mm	22.5 mm	35 mm				
Complete product	RM17JC00MW	RM22JA31MR	RM35JA31MW	RM35JA32MW	RM35JA32MR	RM35JA32MT	

6 Level monitoring relays for DIN rail mounting

Level monitoring by	Resistive probe					Discrete sensor	
Measuring range	5...100 kΩ		25 Ω...1 MΩ			–	
Output contacts/Current	1 CO/8 A		2 CO/8 A		2 CO/5 A	1 CO/5 A	
Power supply	24...240 VAC/VDC	380...415 VAC	24...240 VAC/VDC	380...415 VAC	24...240 VAC/VDC	24...240 VAC/VDC	
Frontal width	22.5 mm					35 mm	
Complete product	RM22LG11MR	RM22LG11MT	RM22LA32MR	RM22LA32MT	RM35LM33MW	RM35LV14MW	

Zelio Time electronic timing relays



1 Timing relays with screw terminals for DIN rail mounting, 1 contact

Type	4 functions
Functions (1)	A, B, C, D, H
Timing range	0.1 s to 100 Hrs, 7 timing Range
Type of output/current	1 CO/5 A
Power supply	24 VDC, 24...240 VAC, 50/60 Hz
Frontal width	7.5 mm
Complete product	RE10RMMU

Timing relays with screw terminals for DIN rail mounting, 1 contact

Type	1 function	2 functions	2 functions	1 function	Multifunction	Multifunction
Functions (1)	A	A, At	L, Li	C	A, At, B, C, H, Ht, D, Di, Ac, Bw	Ad, Ah, N, O, P, Pt, T, Tt, W
Timing range	0.1 s...100 h					
Type of output/current	1 solid state 0.7 A					1 relay output 1 CO/8 A
Power supply	24...240 VAC/VDC	24 VDC, 24...240 VAC			12...240 VAC/VDC	24 VDC, 24...240 VAC
Frontal width	17.5 mm					
Complete product	RE17LAMW	RE17RAMU	RE17RLMU	RE17RCMU	RE17RMMW (2)	RE17RMXMU

3 Timing relays with screw terminals for DIN rail mounting, 2 contacts

Type	3 functions	2 functions	Multifunction
Functions (1)	A, At, Aw	C, Ct	A, At, Aw, C, Ct, D, Dt, Dw, Di, Dit, Diw, H, Ht, Hw, Qg, Qgt, Qgw, Qt, Qtt, Qtw, W, Wt
Timing range	0.05 s...300 h		
Type of output/current	2 CO/8 A		
Power supply	24 VDC, 24...240 VAC		
Frontal width	22.5 mm		
Complete product	RE22R1MAMR	RE22R2CMR	RE22R2MYMR

4 Timing relays with screw terminals for DIN rail mounting, 2 contacts

Type	Multifunction
Functions (1)	A, Ac, Ad, Ah, Ak, At, B, Bw, C, D, Di, Dt, Dit, H, Ht, L, Li, Lt, Lit, N, O P, Pt, Qt, Qtt, Tl, Tt
Timing range	0.1 s...999 h
Type of output/current	2 relay outputs, 8A
Power supply	24...240 VDC/VAC
Frontal width	22.5 mm
Complete product	RENF22R2MMW

5 Miniature plug-in timing relays for DIN rail mounting

Function (1)	A (Delay on energization)					
Timing range	0.1 s...100 h					
Type of output/current	2 CO/5 A			4 CO/5 A		
Power supply	24 VDC	120 VAC	230 VAC	24 VDC	120 VAC	230 VAC
Dimension	21 x 27 mm miniature plug-in					
Complete product	REXL2TMBD	REXL2TMF7	REXL2TMP7	REXL4TMBD	REXL4TMF7	REXL4TMP7
Screw connector socket (3)	RXZE2S108M			RXZE2S114M		

48 x 48 mm analog plug-in (8-pins) timing relays for DIN rail or front panel mounting

Type	1 function	4 functions	2 functions	4 functions
Functions (1)	A	A1, A2, H1, H2	L, Li	A, B, C, Di
Timing range	0.02 s...300 h			
Type of output/current	1 CO/5 A	1 + 1 (instant.)/5 A	2 CO/5 A	
Power supply	24...240 VAC/VDC			
Dimension	48 x 48 mm analog panel-mounted or plug-in			
Complete product	RE48ATM12MW	RE48AMH13MW	RE48ACV12MW	RE48AML12MW
Screw connector socket (4)	RUZC2M		RUZC3M	

A: power on-delay relay	Dit: symmetrical flashing relay (starting pulse-on) (6)	O: delayed safeguard relay
Ac: on-delay & off-delay relay (5)	Diw: symmetrical flashing relay (starting pulse-on) with retrigger/restart control signal	P: pulse delayed relay with fixed pulse length
Act: on-delay & off-delay relay (5) (6)	Dt: symmetrical flashing relay (starting pulse-off) (6)	Pt: pulse delayed relay with fixed pulse length (6)
Ad: pulse delayed relay (5)	Dw: symmetrical flashing relay (starting pulse-off) with retrigger/restart control signal	Qc: star-delta timing relay, 1 CO output
Ah: pulse delayed relay (single cycle) (5)	H: interval relay	Qe: star-delta timing relay, 1 NC + 1 NO output & split common
Ak: asymmetrical on-delay & off-delay relay (5)	He: pulse on de-energization relay	Qg: star-delta timing relay, 2 CO outputs & same common
Akt: asymmetrical on-delay & off-delay relay (5) (6)	Ht: interval relay (6)	Qgt: star-delta timing relay, 2 CO outputs & same common (6)
At: power on-delay relay (6)	Hw: interval relay with retrigger/restart control signal	Qt: star-delta timing relay, 2 CO outputs & split common
Aw: power on-delay relay with retrigger/restart control signal	H1: interval relay (R1 instantaneous, R2 timed)	Qtt: star-delta timing relay, 2 CO outputs & split common (6)
A1: power on-delay relay (R1 instantaneous, R2 timed)	H2: interval relay (both R1/R2 timed)	T: retriggerable bistable relay with control signal on
A2: power on-delay relay (both R1/R2 timed)	K: delay on de-energization relay (without auxiliary supply)	W: interval relay with control signal off
B: interval relay (5)	L: asymmetrical flashing relay (starting pulse-off)	Wt: interval relay with control signal off (6)
Bw: double interval relay (5)	Li: symmetrical flashing relay (starting pulse-on)	
C: off-delay relay (5)	Lt: symmetrical flashing relay (6)	
Ct: off-delay relay (6)	N: safeguard relay	
D: symmetrical flashing relay (starting pulse-off)		
Di: symmetrical flashing relay (starting pulse-on)		

(1) For more details about functions, please refer to the technical descriptions and schemes on our website www.schneider-electric.com.

(2) For spring terminal version, order RE17RMMWS

(3) With separate contacts

(4) With mixed contacts

(5) With control signal

(6) With pause-summation control signal

Phaseo power supplies and transformers



Phaseo power supplies



Regulated switch mode power supplies 60 to 240 W for mounting on panel			
Input voltage		100...240 V ~ and 120...370 V ̸ (1)	
Connection to worldwide line supplies	United States	120 V in phase-to-neutral	Single-phase (N-L1) or 2-phase (L1-L2) connection
		240 V in phase-to-phase	Single-phase (N-L1) or 2-phase (L1-L2) connection
	Europe	230 V in phase-to-neutral	Single-phase (N-L1) connection
		400 V in phase-to-phase	–
	United States	277 V in phase-to-neutral	Single-phase (N-L1) connection
		480 V in phase-to-phase	–
Certifications (2)		CE marking, UL (508), CSA (60950-1), EAC, RCM, TÜV, KC	
Output voltage		24 V ̸	
Reference (according to output current)	2.5 A		ABL1REM24025
	4.2 A		ABL1REM24042
	6.2 A		ABL1REM24062
	10 A		ABL1REM24100



Regulated switch mode power supplies 7 to 144 W for mounting on rail					
Power		7 to 60 W		60 to 144 W	
Input voltage		100...240 V ~ and 120...250 V ̸			
Connection to worldwide line supplies	United States	120 V in phase-to-neutral	Single-phase (N-L1) or 2-phase (L1-L2) connection		
		240 V in phase-to-phase	Single-phase (N-L1) or 2-phase (L1-L2) connection		
	Europe	230 V in phase-to-neutral	Single-phase (N-L1) connection		
		400 V in phase-to-phase	Single-phase (N-L1) connection		
	United States	277 V in phase-to-neutral	–		
		480 V in phase-to-phase	–		
Certifications (2)		CE marking, UL (508), CSA (60950-1), EAC, RCM, TÜV, KC			
Output voltage		12 V ̸		24 V ̸	
Reference (according to output current)	0.3 A		–	ABL8MEM24003	–
	0.6 A		–	ABL8MEM24006	–
	1.2 A		–	ABL8MEM24012	–
	2 A		ABL8MEM12020	–	–
	2.5 A		–	ABL7RM24025	–
	3 A		–	–	ABL8REM24030
	5 A		–	–	ABL8REM24050

(1) Voltage/frequency of input is not indicated on the product.

(2) Please consult detail on certifications for each reference in the individual data sheet available on our website www.schneider-electric.com.

Phaseo power supplies (continued)



Regulated switch mode power supplies 72 to 960 W for mounting on rail (wide input voltage range)

Input voltage		100...120 V ~ and 200...500 V ~ (1)	380...500 V ~	
Connection to worldwide line supplies	United States	120 V in phase-to-neutral	Single-phase (N-L1) or 2-phase (L1-L2) connection	–
		240 V in phase-to-phase	Single-phase (N-L1) or 2-phase (L1-L2) connection	–
	Europe	230 V in phase-to-neutral	Single-phase (N-L1) or 2-phase (L1-L2) connection	3-phase (L1-L2-L3) connection
		400 V in phase-to-phase	Single-phase (N-L1) or 2-phase (L1-L2) connection	3-phase (L1-L2-L3) connection
	United States	277 V in phase-to-neutral	Single-phase (N-L1) or 2-phase (L1-L2) connection	3-phase (L1-L2-L3) connection
		480 V in phase-to-phase	Single-phase (N-L1) or 2-phase (L1-L2) connection	3-phase (L1-L2-L3) connection
Certifications (2)		CE marking, UL (508), CSA (60950-1), CB Scheme, EAC, RCM, TÜV, KC		
Compatibility	With function modules	Yes with all Phaseo function modules (3)		
Output voltage		24 V ⎓		
Reference (according to output current)	3 A	ABL8RPS24030	–	
	5 A	ABL8RPS24050	–	
	10 A	ABL8RPS24100	–	
	20 A	ABL8RPM24200	ABL8WPS24200	
	40 A	–	ABL8WPS24400	



Function modules for continuity of service (only compatible with ABL8RP/ABL8WP power supplies)

Type of function		Battery modules (4) (5)	Solutions to microbreaks and power outages (5)	Redundancy module
Input voltage		24 V ⎓		
Certifications (2)		CE marking, UL (508), CSA (60950-1), EAC, RCM		
Compatibility	With power supplies	Yes but only with ABL8RP/ABL8WP Phaseo power supplies		
Output voltage		24 V ⎓		
Reference (according to output current)	3 Ah	ABL8BPK24A03	–	–
	7 Ah	ABL8BPK24A07	–	–
	12 Ah	ABL8BPK24A12	–	–
	20 A	–	ABL8BBU24200	–
	40 A	–	ABL8BBU24400	ABL8RED24400

(1) Except ABL8RPM24200: 100...240 V and 200...240 V ~.

(2) Please consult detail on certifications for each reference in the individual data sheet available on our website www.schneider-electric.com.

(3) Compatible modules: buffer module, batteries and battery control modules, redundancy module, and discriminating downstream protection module. For more information, see the Phaseo catalog on our website www.schneider-electric.com.

(4) Supplied with 20 or 30 A fuse, depending on the model.

(5) Holding time depending on the load. Please refer to table of compatibility of battery module with holding time in the Phaseo catalog on our website www.schneider-electric.com.

Phaseo transformers



Single winding transformers				
Operating temperature			40° C	50° C
Input voltage			230 V ~	230 V ~ and 400 V ~
Connection to worldwide line supplies	United States	120 V in phase-to-neutral	–	–
		240 V in phase-to-phase	–	2-phase (L1-L2) connection
	Europe	230 V in phase-to-neutral	Single-phase (N-L1) connection	Single-phase (N-L1) connection
		400 V in phase-to-phase	–	2-phase (L1-L2) connection
Applications			SELV transformer (1)	SELV transformer (1) Isolation transformer
Certifications (2)			CE marking, EAC	ULus, CE marking, UL (506), EAC
Output voltage			24 V ~	230 V ~
Reference (according to nominal power)	25 VA	–	ABL6TS02B	–
	40 VA	ABT7ESM004B	ABL6TS04B	ABL6TS04U
	63 VA	ABT7ESM006B	ABL6TS06B	ABL6TS06U
	100 VA	ABT7ESM010B	ABL6TS10B	ABL6TS10U
	160 VA	ABT7ESM016B	ABL6TS16B	ABL6TS16U
	250 VA	ABT7ESM025B	ABL6TS25B	ABL6TS25U
	400 VA	–	ABL6TS40B	ABL6TS40U
	630 VA	–	ABL6TS63B	ABL6TS63U
	1,000 VA	–	ABL6TS100B	ABL6TS100U
	1,600 VA	–	–	ABL6TS160U
2,500 VA	–	–	ABL6TS250U	

(1) SELV = Safety Extra Low Voltage.

(2) Please consult detail on certifications for each reference in the individual data sheet available on our website www.schneider-electric.com.

Note: Please consult the Phaseo catalog on our website www.schneider-electric.com for a wider choice of power supplies or transformers.

Phaseo Easy ABL2K

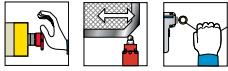


ABL2K							
Input Voltage single-phase (47-63Hz)	Output Voltage	Power	Output current	Automatic protect reset	Voltage switching	Cooling design	Reference
100...240 VAC	24 VDC	35W	1.5A	Yes	Automatic		ABL 2REM24015K
		50W	2.2A	Yes	Automatic	Free Air Convection	ABL 2REM24020K
100...120 VAC 200...240 VAC		100W	4.5A	Yes	Automatic		ABL 2REM24045K
		150W	6.5A	Yes	Manual		ABL 2REM24065K
		200W	8.3A	Yes	Manual		ABL 2REM24085K
		250W	10.5A	Yes	Manual	Forced air cooling by built-in DC FAN	ABL 2REM24100K
		300W	14.6A	Yes	Manual		ABL 2REM24150K

Preventa safety modules and modular safety controllers



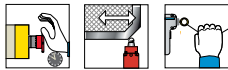
Preventa safety modules



Function: Emergency stop, switch monitoring, and protective guard applications

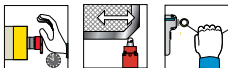
Preventa safety modules conforming to Cat. 4, PL e, SIL3, and STOP category 0

Terminal type		Captive screw clamp terminal				Spring clamp terminal	
Connections		Integrated in module		Removable from module			
Number of instantaneous safety circuits		3 NO	3 NO	3 NO	3 NO	3 NO	3 NO
Number of additional outputs		–	1 solid-state	–	1 solid-state	1 NC	1 NC
Reference	24 VAC/VDC	XPSAF5130	XPSAC5121	XPSAF5130P	XPSAC5121P	–	–
		–	–	–	–	XPSAXE5120P	–
		–	–	–	–	–	XPSAXE5120C
	48 VAC	–	XPSAC1321	–	XPSAC1321P	–	–
	115 VAC	–	XPSAC3421	–	XPSAC3421P	–	–
	230 VAC	–	XPSAC3721	–	XPSAC3721P	–	–



Preventa safety modules conforming to Cat. 4, PL e, SIL3 or Cat. 3, PL d, SIL2 (1), and STOP category 1

Terminal type		Captive screw clamp terminal				Spring clamp terminal		
Connections		Integrated in module		Removable from module				
Number of instantaneous safety circuits		2 NO	3 NO (3)	2 NO	3 NO	2 NO	3 NO	
Number of delayed safety circuits		3 NO	3 NO	1 NO	3 NO	3 NO	3 NO	
Number of additional outputs		4 solid-state	3 solid-state	–	1 NC	4 solid-state	3 solid-state	
Reference (according to voltage and time-delay setting range)	24 VAC/VDC	0...30 s	XPSATE5110	–	–	XPSATE5110P	–	
	24 VDC	0...300 s	–	XPSAV11113	–	–	XPSAV11113P	
		0...300 s (2)	–	XPSAV11113T050	–	–	–	
		0.1...2 s	–	XPSAV11113Z002	–	–	–	
		0.1...3 s	–	–	–	XPSATR1153P	–	–
		0.1...30 s	–	–	–	XPSATR11530P	–	–
		0.15...3 s	–	–	XPSABV1133P	–	–	–
		1.5...30 s	–	–	XPSABV11330P	–	–	
	115 VAC	0.1...30 s	XPSATE3410	–	–	–	XPSATE3410P	–
	115/230 VAC	0.1...3 s	–	–	–	XPSATR3953P	–	–
		0.1...30 s	–	–	–	XPSATR39530P	–	–
	230 VAC	0...30 s	XPSATE3710	–	–	–	XPSATE3710P	–



Preventa safety modules conforming to Cat. 4, PL e, SIL3 or Cat. 3, PL d, SIL2 (1), and STOP category 1 (continued)

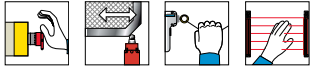
Terminal type		Spring clamp terminal			
Connections		Removable from module			
Number of instantaneous safety circuits		2 NO	3 NO		
Number of delayed safety circuits		3 NO	3 NO		
Number of additional outputs		–	1 NC		
Reference (according to voltage and time-delay setting range)	24 VDC	0.1...3 s	–	XPSATR1153C	–
	24 VDC	0.15...3 s	XPSABV1133C	–	–
		1.5...30 s	XPSABV11330C	–	–
		0.1...30 s	–	XPSATR11530C	–
	115/230 VAC	0.1...3 s	–	XPSATR3953C	–
	0.1...30 s	–	XPSATR39530C	–	

(1) Cat. 4, PL e, SIL3 if direct opening contacts and Cat. 3, PL d, SIL2 if time-delayed opening (except for XPSAV safety modules).

(2) Start delay: 0.5 s.

(3) XPSAV modules reach Cat. 4, PL e, SIL3 both with direct opening and with time-delayed opening contacts.

Preventa safety modules



Function: Emergency stop, switch monitoring, and safety light curtain monitoring

Preventa safety modules conforming to Cat. 4, PL e, SIL3, and STOP category 0

Terminal type		Captive screw clamp terminal			
Connections		Integrated in module		Removable from module	
Number of instantaneous safety circuits		3 NO	7 NO	3 NO	7 NO
Number of additional outputs	With relay	–	2 NC	–	2 NC
	Solid-state	–	4	–	4
Reference	24 VAC/VDC	XPSAFL5130	–	XPSAFL5130P	–
	–	–	XPSAR311144	–	XPSAR311144P
	115 VAC	–	XPSAR351144	–	XPSAR351144P
	230 VAC	–	XPSAR371144	–	XPSAR371144P



Function: Emergency stop, switch monitoring, sensing mat/edges, and safety light curtain monitoring

Preventa safety modules conforming to Cat. 4, PL e, SIL3, and STOP category 0

Terminal type		Captive screw clamp terminal			
Connections		Integrated in module		Removable from module	
Number of instantaneous safety circuits		3 NO		3 NO	
Number of additional outputs		4 solid-state + 1 NC		4 solid-state + 1 NC	
Reference	24 VAC/VDC	XPSAK311144		XPSAK311144P	
	48 VAC	–		XPSAK331144P	
	110 VAC	XPSAK361144		XPSAK361144P	
	120 VAC	XPSAK351144		XPSAK351144P	
	230 VAC	XPSAK371144		XPSAK371144P	



Function: Enabling switch monitoring

Preventa safety modules conforming to Cat. 4, PL e, SIL3, and STOP category 0

Terminal type		Captive screw clamp terminal			
Connections		Integrated in module		Removable from module	
Number of instantaneous safety circuits		2 NO		2 NO	
Number of additional outputs		2 NO		2 solid-state	
Reference	24 VDC	XPSVC1132		XPSVC1132P	

Preventa safety modules



Function: Electric monitoring of two-hand control stations (1)

Preventa safety modules conforming to Cat. 4, PL e, SIL3, and STOP category 0

Terminal type	Captive screw clamp terminal	Spring clamp terminal	Fixed screw clamp terminal
Connections	Removable from module		
Type conforming to standard EN5074	IIC	IIC	IIC
Number of instantaneous safety circuits	2 NO	2 NO	2 NO
Number of additional outputs	1 NC	2 solid-state	1 NC
Reference	24 VDC	XPSBF1132P	–
	24 VAC/VDC	–	XPSBCE3110C
	115 VAC	–	XPSBCE3410C
	230 VAC	–	XPSBCE3710C



Preventa safety modules conforming to Cat. 1, PL c, SIL1, and STOP category 0

Terminal type	Captive screw clamp terminal	Spring clamp terminal
Connections	Removable from module	
Type conforming to standard EN5074	IIIA	IIIA
Number of instantaneous safety circuits	1 NO	1 NO
Number of additional outputs	1 NC	1 NC
Reference	24 VAC/VDC	XPSBAE5120C
	115...230 VAC/120 VAC	XPSBAE3920P

(1) Can be used with WY2SB71 or XY2SB714 two-hand control stations.



Function: Monitoring of photo-electric sensors

Preventa safety modules conforming to Cat. 2, PL c, SIL1, and STOP category 0

Terminal type	Captive screw clamp terminal	Spring clamp terminal
Connections	Integrated in module	Removable from module
Number of instantaneous safety circuits	2 NO	2 NO
Number of additional solid-state outputs	4	4
Reference	24 VDC	XPSCM1144P



Function: Increasing the number of safety contacts

Preventa safety modules conforming to Cat. 4, PL e, SIL3, and STOP category 0

Terminal type	Captive screw clamp terminal	Spring clamp terminal
Connections	Removable from module	
Number of instantaneous safety circuits	4 NO	8 NO
Number of additional outputs	2 NC	1 NC
Reference	24 VAC/VDC	XPSECME5131P
	–	–
	–	XPSECPE5131P
	–	–
	–	XPSECME5131C
	–	–
	–	XPSECPE5131C

Preventa safety modules



Function: Monitoring of applications requiring safety time delays

Preventa safety modules conforming to Cat. 3, PL e, SIL2, and STOP category 0

Terminal type	Captive screw clamp terminal		
Connections	Removable from module		
For applications with	Interlocking on high inertia machines	Safety switchover contact	
Number of safety circuits	1 delayed	1 pulse type	
Number of additional outputs	With relay	2 NC	2 NC
	Solid-state	2	2
Reference	24 VAC/VDC	XPSTSA5142P	–
		–	XPSTSW5142P
	115 VAC	XPSTSA3442P	–
		–	XPSTSW3442P
	230 VAC	XPSTSA3742P	–
		–	XPSTSW3742P



Function: Coded magnetic switch monitoring

Preventa safety modules conforming to Cat. 4, PL e, SIL3, and STOP category 0

Terminal type	Captive screw clamp terminal						
Connections	Integrated in module			Removable from module			
Number of instantaneous safety circuits	2 NO	2 NO	2 NO	2 NO	2 NO		
Synchronization time between inputs	< 0.5 s	< 0.5 s	< 2.2 s	< 0.5 s	< 0.5 s		
Maximum number of coded magnetic switches (Cat. 4, PL e, SIL3)	2	6	6	2	6		
Maximum number of coded magnetic switches (Cat. 3, PL d, SIL2)	12	36	36	12	9		
Number of additional solid-state outputs	2	2	2	2	2		
Reference	24 VDC	XPSTSA5142P	–	–	XPSTSW5142P		
		–	XPSTSA3442P	–	–	XPSTSW3442P	
		–	–	XPSTSA3742P	–	–	XPSTSW3742P
		–	–	XPSTSW3742P	–	–	

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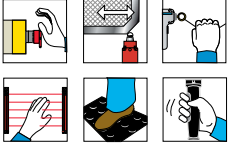


Function: Zero speed detection of motors

Preventa safety modules conforming to Cat. 3, PL d, SIL2, and STOP category 0

Terminal type	Captive screw clamp terminal			
Connections	Removable from module			
Number of safety circuits	1 NO		1 NO	
Number of additional outputs	2 solid-state + 1 NC		2 solid-state + 1 NC	
Frequency of motor power supply	≤ 60 Hz		> 60 Hz	
Reference	24 VDC	Inertia applications	XPVNE1142P	XPVNE1142HSP
		High inertia applications	XPVNE1142LFP	–
		Low speed and high inertia applications	XPVNE1142LSP	–
	115 VAC	Inertia applications	XPVNE3442P	XPVNE3442HSP
		High inertia applications	XPVNE3442LFP	–
		Inertia applications	XPVNE3742P	XPVNE3742HSP

Preventa safety modules



Safety controllers with 2 pre-defined independent functions

Preventa safety modules conforming to Cat. 4, PL e, SIL3, and STOP category 0

Terminal type	Captive screw clamp terminal	
Connections	Integrated in module	Removable from module
Number of safety circuits	3 NO per function (6 NO in total)	3 NO per function (6 NO in total)
Number of additional solid-state outputs	3	3
Reference	24 VDC	
	XPSMP11123	XPSMP11123P

Preventa modular safety controllers



Safety controller

Description	Safety controller CPUs	CPU combined with backplane expansion connector
No. and type of inputs	8 digital inputs + 2 for Start/Restart interlock	
No. and type of outputs	2 OSSD pairs + 4 test outputs + 2 status outputs	
Terminal type	Screw (1)	
Reference	XPSMCMCP0802	XPSMCMCP0802BC



Safe expansion modules

Safe expansion I/O modules

Description	Safe input expansion modules			Safe output expansion modules		
No. and type of inputs	8 digital inputs + 2 for Start/Restart interlock	8 digital inputs	16 digital inputs	12 digital inputs	2 for Start/Restart interlock	4 for Start/Restart interlock
No. and type of outputs	2 OSSD pairs + 4 test outputs + 2 status outputs	4 test outputs	4 test outputs	8 test outputs for 4-wire safety mats	2 OSSD pairs + 2 status outputs	4 OSSD pairs + 4 status outputs
Terminal type	Screw (1)					
Reference	XPSMCMX0802	XPSMCMDI0800	XPSMCMDI1600	XPSMCMDI1200MT	XPSMCMDO0002	XPSMCMDO0004



Safe relay output modules

Description	Safe relay output modules (without expansion bus connection)		Safe relay output modules (wired with the expansion bus connector)	
No. and type of inputs	1 for Start/Restart interlock		4 for Start/Restart interlock	
No. and type of outputs	2 relays for 1 output (2 NO + 1 NC)		4 relays for 2 independent outputs (4 NO + 2 NC)	
Terminal type	Screw (1)			
Reference	XPSMCMER0002	XPSMCMER0004	XPSMCMRO0004	XPSMCMRO0004DA



Safe speed monitoring modules

Description	Safe speed monitoring modules					
No. and type of inputs	- 1 Sin/Cos encoder and 2 proximity sensor inputs	- 2 Sin/Cos encoders and 2 proximity sensor inputs	- 1 TTL encoder and 2 proximity sensor inputs	- 2 TTL encoders and 2 proximity sensor inputs	- 1 HTL encoder and 2 proximity sensor inputs	- 2 HTL encoders and 2 proximity sensor inputs
Connector type	- 1x RJ 45 (ENC1) - Proximity sensor connection via terminal blocks	- 2x RJ 45 (ENC1/ENC2) - Proximity sensor connection via terminal blocks	- 1x RJ 45 (ENC1) - Proximity sensor connection via terminal blocks	- 2x RJ 45 (ENC1/ENC2) - Proximity sensor connection via terminal blocks	- 1x RJ 45 (ENC1) - Proximity sensor connection via terminal blocks	- 2x RJ 45 (ENC1/ENC2) - Proximity sensor connection via terminal blocks
Terminal type	Screw (1)					
Reference	XPSMCMEN0100SC	XPSMCMEN0200SC (2)	XPSMCMEN0100TT	XPSMCMEN0200TT	XPSMCMEN0100HT	XPSMCMEN0200HT

(1) References are given for products with a screw connector. For equivalent references with a spring clamp connector, add a "G" at the end of the reference.

Preventa modular safety controllers



Safe expansion modules (continued)

Safe communication expansion modules

Description	Safe RS 485 bus expansion module for remote extension	
Characteristics	1 connection interface: single channel transmitter/receiver network connection	2 connections interface: dual channel transmitter/receiver network connection
Terminal type	Screw (1)	
Reference	XPSMCMCO0000S1	XPSMCMCO0000S2

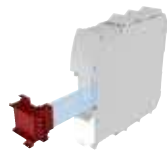


Non-Safe communication modules

Description	Non-Safe communication modules				
Fieldbus/network type	CANopen	Ethernet IP	Modbus Serial (RTU)	Modbus TCP	Profibus DP
Fieldbus connector type	SUB-D 9-way (female)	1x RJ 45 (in/out)	1x RJ 45	1x RJ 45 (in/out)	SUB-D 9-way (male)
Terminal type	Screw (1)				
Reference	XPSMCMCO0000CO	XPSMCMCO0000EI	XPSMCMCO0000MB	XPSMCMCO0000EM	XPSMCMCO0000PB

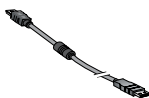
Software

Description	SoSafe configurable software V1.6
Application	To configure a logic connection between the inputs and outputs of the XPSMCMCP0802 safety controller CPU and the components of the application being developed
PC hardware requirements	RAM: 256 MB, Hard disk \geq 300 MB of free space USB connector: 1.1 or 2.0, CD-ROM drive
PC software requirements	Windows XP with Service Pack 3 installed or Windows Vista, 32-bit or Windows 7 or 8.1, 32-bit and 64-bit Microsoft Framework 3.5 installed on the PC
Reference	Free software available to download from www.schneider-electric.com



Accessories

Description	Backplane expansion connector (2)	Memory card
Application	To connect the various expansion modules to the safety controller CPU	To save configuration data for subsequent transfer to a new device without using a PC
Reference	XPSMCMCN0000SG	XPSMCMME0000



Description	Configuration cable	RS 485 shielded cables		
Use	For software configuration, between a PC, the safety controller CPU, and the fieldbus communication modules. Equipped with 2x USB connectors: USB A and USB mini B	Between two Safe communication expansion modules		
Reference	TCSXCNAMUM3P	TSXSCMCN010	TSXSCMCN025	TSXSCMCN050

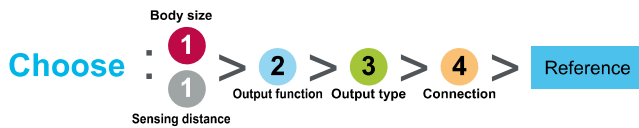
(1) References are given for products with a screw connector. For equivalent references with a spring clamp connector, add a "G" at the end of the reference. For example, XPSMCMCO0000S1 becomes XPSMCMCO0000S1G.

Detection components Panorama



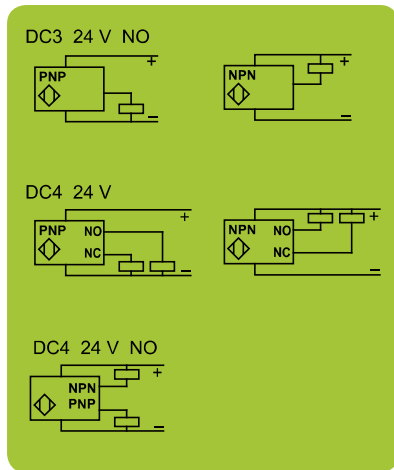
Simply easy!™

Ultrasonic: OsiSense XX



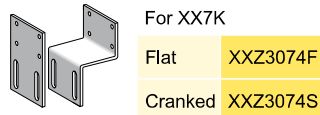
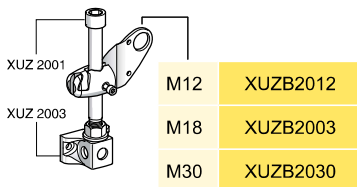
		M12		M18		M18 metal	M30		M30 stainless
Sensing distance		0.05 m	0.1 m	0.15 m	0.5 m Adjust.	0.05 m fixed	1 m Adjust.	8 m Adjust.	1 m Adjust.
Connectors/Cables		M8 4 pin	M8 3 pin	M12 4 pin	M12 4 pin	M12 4 pin	M12 4 pin	M12 4 pin	M12 4 pin
NO	DC4	PNP/NPN	XX512A1KAM8	XX518A1KAM12		XX630A1KAM12			
	DC3	PNP	XX512A2PAM8	XX518A3PAM12 (1)		XXV18B1PAM12	XX6V3A1PAM12 (1)		
		NPN	XX512A2NAM8	XX518A3NAM12 (1)			XX6V3A1NAM12 (1)		
NO+NC	DC4	PNP					XX630A1PCM12	XX630A3PCM12	XX630S1PCM12
		NPN					XX630A1NCM12	XX630A3NCM12	XX630S1NCM12
Analogue	DC4	4...20 mA		XX918A3C2M12 (1)			XX9V3A1C2M12 (1)	XX930A3A2M12	XX930S1A2M12
		0...10 V		XX918A3F1M12 (1)			XX9V3A1F1M12 (1)	XX930A3A1M12	XX930S1A1M12

(1) Adjustable with XXZPB100

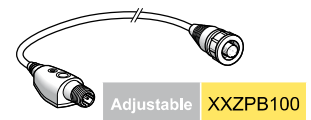


		Flat 7.6x19x33		Flat 16x30x74	Flat 60x30x18 + M18	
Sensing distance		0.1 m		0.25 m	0.5 m Adjust.	0.5 m Adjust.
Connectors		M12 4 pin		M12 4 pin	M12 4 pin	M12 4 pin
NO	DC3	PNP	XX7F1A2PAL01M12	XX7K1A2PAM12	XX7V1A1PAM12 (1)	
		NPN	XX7F1A2NAL01M12	XX7K1A2NAM12	XX7V1A1NAM12 (1)	
	Analogue	DC4	4...20 mA		XX9V1A1C2M12 (1)	
0...10 V			XX9V1A1F1M12 (1)			

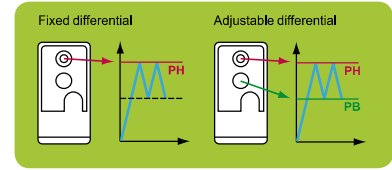
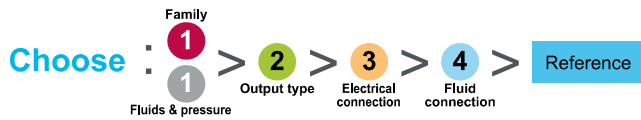
(1) Adjustable with XXZPB100



M12	XXZ12
M18	XUZA118
M30	XXZ30
XX7F	XXZ1933



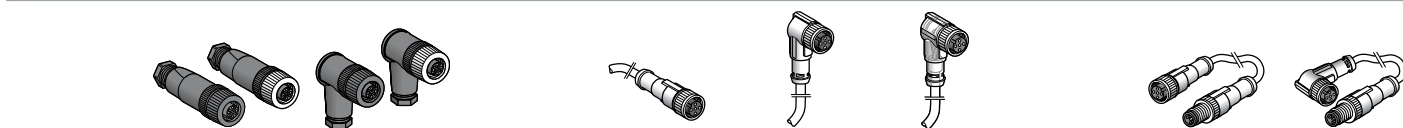
Pressure switches: OsiSense XM



XMLA / XMLB Electromechanical		Hydraulic oils, air, fresh water, sea water / Temp. : up to 70° C							
Screw terminal		1 C/O single pole contact fixed differential			1 C/O single pole contact adjustable differential				
		Bar	psi	ISO M20	Pg13	DIN connector	ISO M20	Pg13	DIN connector
1 C/O 	-1	-14.5	XMLAM01V2S12	XMLAM01V2S11	XMLAM01V2C11	XMLBM02V2S12	XMLBM02V2S11	XMLBM02V2C11	
	2.5	36.3	XMLA002A2S12	XMLA002A2S11	XMLA002A2C11	XMLB002A2S12	XMLB002A2S11	XMLB002A2C11	
	4	58	XMLA004A2S12	XMLA004A2S11	XMLA004A2C11	XMLB004A2S12	XMLB004A2S11	XMLB004A2C11	
	10	145	XMLA010A2S12	XMLA010A2S11	XMLA010A2C11	XMLB010A2S12	XMLB010A2S11	XMLB010A2C11	
	20	290	XMLA020A2S12	XMLA020A2S11	XMLA020A2C11	XMLB020A2S12	XMLB020A2S11	XMLB020A2C11	
	35	508	XMLA035A2S12	XMLA035A2S11	XMLA035A2C11	XMLB035A2S12	XMLB035A2S11	XMLB035A2C11	
Hydraulic oils / Temp. : up to 160° C									
G 1/4 (female)		1	14.5	XMLA001R2S12	XMLA001R2S11	XMLA001R2C11	XMLB001R2S12	XMLB001R2S11	XMLB001R2C11
		70	1015	XMLA070D2S12	XMLA070D2S11	XMLA070D2C11	XMLB070D2S12	XMLB070D2S11	XMLB070D2C11
		160	2320	XMLA160D2S12	XMLA160D2S11	XMLA160D2C11	XMLB160D2S12	XMLB160D2S11	XMLB160D2C11
		300	4350	XMLA300D2S12	XMLA300D2S11	XMLA300D2C11	XMLB300D2S12	XMLB300D2S11	XMLB300D2C11
		500	7250	XMLA500D2S12	XMLA500D2S11	XMLA500D2C11	XMLB500D2S12	XMLB500D2S11	XMLB500D2C11

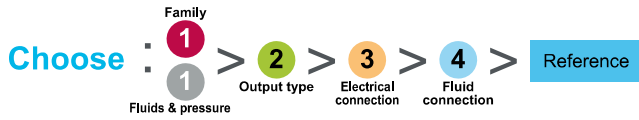
XMLR Electronic + Display		Hydraulic oils, air, fresh water, refrigerant fluids					
M12 4 pin or 5 pin		-20... +80° C		Analogue output		Analogue + 2 switching outputs	
		Bar	psi	4...20 mA	0...10 V	PNP - NO/NC programmable	
						4...20 mA	
		-1	-14.5	XMLRM01G0T25	XMLRM01G0T75	XMLRM01G2P25	
		1	14.5	XMLR001G0T25	XMLR001G0T75		
		2.5	35.2	XMLR2D5G0T25	XMLR2D5G0T75		
		10	145	XMLR010G0T25	XMLR010G0T75	XMLR010G2P25	
		16	232	XMLR016G0T25	XMLR016G0T75	XMLR016G2P25	
		25	362	XMLR025G0T25	XMLR025G0T75		
		40	580	XMLR040G0T25	XMLR040G0T75	XMLR040G2P25	
		100	1450	XMLR100M0T25	XMLR100M0T75		
		160	2320	XMLR160M0T25	XMLR160M0T75		
		250	3625	XMLR250M0T25	XMLR250M0T75	XMLR250M2P25	
400	5800	XMLR400M0T25	XMLR400M0T75	XMLR400M2P25			
600	8700	XMLR600M0T25	XMLR600M0T75				
Hydraulic oils, air, fresh water, refrigerant fluids		-20... +80° C		Analogue + switching output		2 switching outputs	
				PNP - NO/NC programmable		PNP - NO/NC programmable	
		Bar	psi	4...20 mA	0...10 V		
		-1	-14.5	XMLRM01G1P25	XMLRM01G1P75	XMLRM01G2P05	
		1	14.5	XMLR001G1P25	XMLR001G1P75	XMLR001G2P05	
		2.5	35.2	XMLR2D5G1P25	XMLR2D5G1P75	XMLR2D5G2P05	
		10	145	XMLR010G1P25	XMLR010G1P75	XMLR010G2P05	
		16	232	XMLR016G1P25	XMLR016G1P75	XMLR016G2P05	
		25	362	XMLR025G1P25	XMLR025G1P75	XMLR025G2P05	
		40	580	XMLR040G1P25	XMLR040G1P75	XMLR040G2P05	
		100	1450	XMLR100M1P25	XMLR100M1P75	XMLR100M2P05	
		160	2320	XMLR160M1P25	XMLR160M1P75	XMLR160M2P05	
		250	3625	XMLR250M1P25	XMLR250M1P75	XMLR250M2P05	
400	5800	XMLR400M1P25	XMLR400M1P75	XMLR400M2P05			
600	8700	XMLR600M1P25	XMLR600M1P75	XMLR600M2P05			


8




Cabling XM			Connectors (female)				PUR pre wired connectors (female)*			PUR Jumper cables			
M12	straight	elbowed	M12	straight	elbowed	elbowed PNP LED	M12 (female)	straight	elbowed	M12 (male)	straight	elbowed	
(1)	4 pin	XZCC12FDM40B	XZCC12FCM40B	4 pin	2 m	XZCP1141L2	XZCP1241L2	XZCP1340L2		4 pin	1 m	XZCR1511041C1	XZCR1512041C1
(2)	4 pin	XZCC12FDP40B	XZCC12FCP40B		5 m	XZCP1141L5	XZCP1241L5	XZCP1340L5			2 m	XZCR1511041C2	XZCR1512041C2
(1)	5 pin	XZCC12FDM50B	XZCC12FCM50B		10 m	XZCP1141L10	XZCP1241L10	XZCP1340L10					

Pressure switches: OsiSense XM





XMLP Electronic transmitter		Hydraulic oils, air, fresh water, refrigerant fluids				
M12 4 pin (male)		-30...+85° C		Analogue output		
		Bar	psi	4...20 mA	0...10 V	0.5...4.5 V
		-1	-14.5	XMLPM00GD21F	XMLPM00GD71F	XMLPM00GD11F
		1	14.5	XMLP001GD21F	XMLP001GD71F	XMLP001GD11F
		6	87	XMLP006GD21F	XMLP006GD71F	XMLP006GD11F
		10	145	XMLP010BD21V	XMLP010BD71V	XMLP010BD11V
		16	232	XMLP016BD21V	XMLP016BD71V	XMLP016BD11V
		25	362	XMLP025BD21V	XMLP025BD71V	XMLP025BD11V
		40	580	XMLP040BD21V	XMLP040BD71V	XMLP040BD11V
		60	870	XMLP060BD21V	XMLP060BD71V	XMLP060BD11V
		100	1450	XMLP100BD22	XMLP100BD72	XMLP100BD12
		160	2320	XMLP160BD22	XMLP160BD72	XMLP160BD12
		250	3625	XMLP250BD22	XMLP250BD72	XMLP250BD12
		400	5800	XMLP400BD22	XMLP400BD72	XMLP400BD12
		600	8700	XMLP600BD22	XMLP600BD72	XMLP600BD12

G 1/4A (male)

ZMLP Display and switch		4-20 mA analogue + switching output		2 switching outputs	
M12 4 pin (male)		NO/NC Programmable		NO/NC Programmable	
PNP		Window	Hysteresis	Fixed hysteresis	
		ZMLPA1P2SW	ZMLPA1P2SH	ZMLPA2P0SH	
		Quick fixing bracket		Horizontal plan XMLPZLH01	Vertical plan or pipe XMLPZLV01

M12 4 pin (female)

Only usable with 4-20mA analogue output XMLP electronic transmitter

Cabling XM

Connectors (female)			PUR pre wired connectors (female)*				PUR Jumper cables				
M12	straight	elbowed	M12	straight	elbowed	elbowed PNP LED	M12 (female)	straight	elbowed		
(1)	4 pin	XZCC12FDM40B	4 pin	2 m	XZCP1141L2	XZCP1241L2	XZCP1340L2	M12 (male)	straight	straight	
(2)	4 pin	XZCC12FDP40B		5 m	XZCP1141L5	XZCP1241L5	XZCP1340L5	4 pin	1 m	XZCR1511041C1	XZCR1512041C1
(1)	5 pin	XZCC12FDM50B		10 m	XZCP1141L10	XZCP1241L10	XZCP1340L10		2 m	XZCR1511041C2	XZCR1512041C2

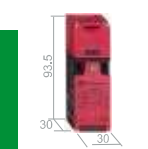
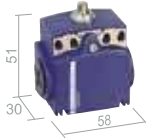
(1) Steel ring (2) Plastic ring

* For a PVC cable, add the letter V after the P. Example: XZCPxxxxx become XZCPVxxxxx

Limit switches: OsiSense XC

Choose: **1** > **2** > **3** > **4** > Reference

Body Head Contact Connection



XCKD Metal	NO+NC Snap	M16						
		Pg11						
		M12 5P						
XCKP Plastic	NO+NC Snap	M16						
		Pg11						
		M12 4P						
XCKT Plastic	NO+NC Snap	M16						
		Pg11						

XCMD Metal	NO+NC Snap	1 m							
	NO+NC Slow	1 m							
	NO+NC Snap	M12 5P							
	1 C/O Snap	M12 4P							

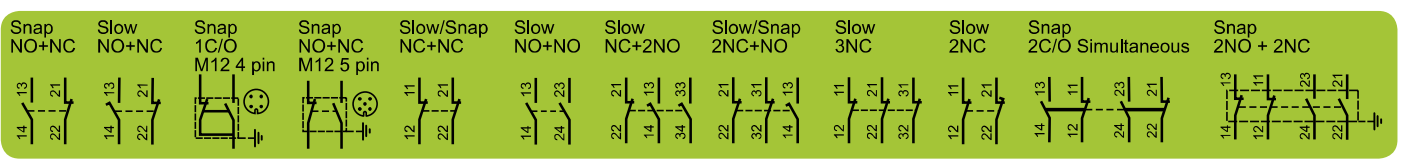
XCKM Metal	NO+NC Snap	M20					
		Pg11					
XCKL Metal	NO+NC Snap	CG					

XCKJ Metal	NO+NC Snap	M20						
		Pg13						
		1/2NPT						
		M12 5P						

(1) Plastic roller (2) Steel roller

XCSA Metal			NC+2NO Slow	2NC+NO Slow	3NC Slow	Accessories	
	M20						
	Pg13						
	1/2NPT						

XCSPA Plastic			NC+NO Slow	2NC Slow	2NO+NC Slow	2NC+NO Slow	2NC+NO Snap	Accessories	
	M16								
	Pg11								
	1/2NPT								



- M16 Tapped M16x1.5 for ISO cable gland
- M20 Tapped M20x1.5 for ISO cable gland
- Pg11 Tapped for a N°11 cable gland
- Pg13 Tapped for a N°13 cable gland
- 1/2NPT Tapped for a 1/2" NPT
- PF1/2 Tapped for a PF1/2"
- M12 5P Connector M12, 5 pin
- M12 4P Connector M12, 4 pin

Cabling XC

		PUR pre wired connectors (female)*			Connectors (female)		
	M12	straight	elbowed	elbowed PNP LED	M12	straight	elbowed
	4 pin				(1) 4 pin		
	5 m				(2) 4 pin		
	10 m				(1) 5 pin		

Limit switches: OsiSense XC

XCKP / XCKD / XCKT
Plastic / Metal / Plastic

	NO+NC Snap	NO+2NC Snap	NO+NC Slow	NC+NC Slow	NC+NC Snap	NO+NO Slow		NO+NC Snap		XCKT	NC+NC Snap
XCKP	ZCP21	ZCP39	ZCP25	ZCP27	ZCP29	ZCP28		M12 4P ZCP21M12		M16	ZCT21P16
XCKD	ZCD21	ZCD39	ZCD25	ZCD27	ZCD29	ZCD28		M12 5P ZCD21M12		Pg11	ZCT21G11
											NO+NC Slow
										M16	ZCT25P16
										Pg11	ZCT25G11

Cable entry	M16	M20	Pg11	Pg13.5	1/2 NPT	PF1/2
XCKP	ZCPEP16	ZCPEP20	ZCPEG11	ZCPEG13	ZCPEN12	ZCPEF12
XCKD	ZCDEP16	ZCDEP20	ZCDEG11	ZCDEG13	ZCDEN12	ZCDEF12

XCMD
Metal

	NO+NC Snap		NO+NC Slow		2NO+2NC Snap		NO+NC Snap	1C/O Snap
	ZCMD21		ZCMD25		ZCMD4D		M12 5P ZCMD21C12	M12 4P ZCMD21M12
1 m	ZCMC21L1	ZCMD21L1	ZCMC25L1	ZCMD25L1	ZCMC4DL1	ZCMD41L1		
2 m	ZCMC21L2	ZCMD21L2	ZCMC25L2	ZCMD25L2	ZCMC4DL2	ZCMD41L2		
5 m	ZCMC21L5	ZCMD21L5	ZCMC25L5	ZCMD25L5	ZCMC4DL5	ZCMD41L5		

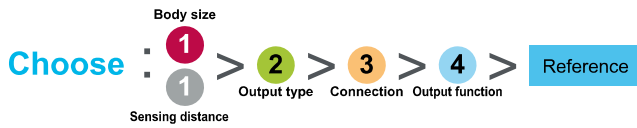
XCKM / XCKL
Metal / Metal

	NO+NC Snap		NO+NC Slow	
3xPg11	ZCKM1		ZCKM5	
3xM20	ZCKM1H29		ZCKM5H29	
PE	ZCKL1		ZCKL5	

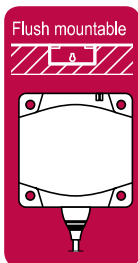
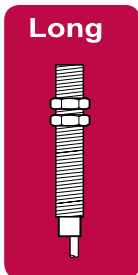
XCKJ
Metal

	NO+NC Snap	NO+NC Snap	2C/O Simult. Snap
Pg13	ZCKJ1	ZCKJ5	ZCKJ2
M20	ZCKJ1H29	ZCKJ5H29	ZCKJ2H29
1/2 NPT	ZCKJ1H7	ZCKJ5H7	ZCKJ2H7

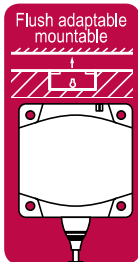
Inductives: OsiSense XS



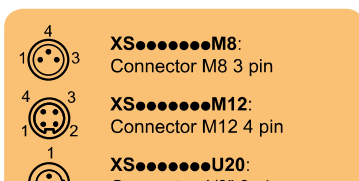
			M8		M12	
Sensing distance			1.5 mm	2.5 mm	2 mm	4 mm
DC3	PNP	cable	XS508B1P A L2	XS108B3P A L2	XS512B1P A L2	XS112B3P A L2
		connector	XS508B1P A M8	XS108B3P A M8	XS512B1P A M12	XS112B3P A M12
	NPN	cable	XS508B1N A L2	XS108B3N A L2	XS512B1N A L2	XS112B3N A L2
		connector	XS508B1N A M8	XS108B3N A M8	XS512B1N A M12	XS112B3N A M12
DC2		cable	XS508B3C A L2	XS608B3C A L2	XS512BSD A L2	XS612B3D A L2
		connector	XS508B3C A L01M12	XS608B3C A L01M12	XS512BSD A M12	XS612B3D A M12
DC3	PNP	cable	XS508BLP A L2	XS608B1P A L2	XS512BLP A L2	XS612B1P A L2
		connector	XS508BLP A M12	XS608B1P A M12	XS512BLP A M12	XS612B1P A M12
	NPN	cable	XS508BLN A L2	XS608B1N A L2	XS512BLN A L2	XS612B1N A L2
		connector	XS508BLN A M12	XS608B1N A M12	XS512BLN A M12	XS612B1N A M12
DC2		cable	XS508B1D A L2	XS608B1D A L2	XS512B1D A L2	XS612B1D A L2
		connector	XS508B1D A M12	XS608B1D A M12	XS512B1D A M12	XS612B1D A M12
AC/DC		cable			XS512B1M A L2	XS612B1M A L2
		connector			XS512B1M A U20	XS612B1M A U20
Output function		NO		A	A	A
		NC		B	B	B



			8x22x8 mm	15x32x8 mm	26x26x13 mm	40x40x15 mm
Sensing distance			2.5 mm	5 mm	10 mm	15 mm
DC3	PNP	cable	XS7J1A1P A L2	XS7F1A1P A L2	XS7E1A1P A L2	XS7C1A1P A L2
		connector	XS7J1A1P A L01M8	XS7F1A1P A L01M8	XS7E1A1P A M8	XS7C1A1P A M8
	NPN	cable	XS7J1A1N A L2	XS7F1A1N A L2	XS7E1A1N A L2	XS7C1A1N A L2
		connector	XS7J1A1N A L01M8	XS7F1A1N A L01M8	XS7E1A1N A M8	XS7C1A1N A M8
DC2		cable	XS7J1A1D A L2	XS7F1A1D A L2	XS7E1A1D A L2	XS7C1A1D A L2
		connector	XS7J1A1D A L01M8	XS7F1A1D A L01M8	XS7E1A1D A M8	XS7C1A1D A M8
DC3	PNP	cable			XS8E1A1P A L2	XS8C1A1P A L2
		connector			XS8E1A1P A M8	XS8C1A1P A M8
	NPN	cable			XS8E1A1N A L2	XS8C1A1N A L2
		connector			XS8E1A1N A M8	XS8C1A1N A M8
AC/DC		cable			XS8E1A1M A L2	XS8C1A1M A L2
		connector			XS8E1A1M A L01U20	XS8C1A1M A L01U20
Output function		NO		A	A	A
		NC		B	B	B



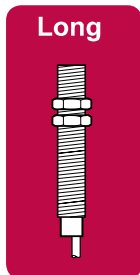
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Cabling XS


		PUR pre wired connectors (female)*	
M8		straight	elbowed
3 pin	2 m	XZCP0566L2	XZCP0666L2
	5 m	XZCP0566L5	XZCP0666L5
	10 m	XZCP0566L10	XZCP0666L10
1/2"			

Inductives: OsiSense XS

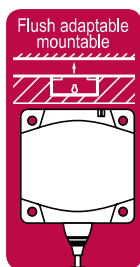
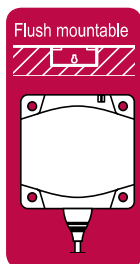


			M18		M30	
Sensing distance			5 mm	8 mm	10 mm	15 mm
DC3	PNP	cable	XS518B1P A L2	XS118B3P A L2	XS530B1P A L2	XS130B3P A L2
		connector	XS518B1P A M12	XS118B3P A M12	XS530B1P A M12	XS130B3P A M12
	NPN	cable	XS518B1N A L2	XS118B3N A L2	XS530B1N A L2	XS130B3N A L2
		connector	XS518B1N A M12	XS118B3N A M12	XS530B1N A M12	XS130B3N A M12
DC2	cable	XS518BSD A L2	XS618B3D A L2	XS530BSD A L2	XS630B3D A L2	
	connector	XS518BSD A M12	XS618B3D A M12	XS530BSD A M12	XS630B3D A M12	
DC3	PNP	cable	XS518BLP A L2	XS618B1P A L2	XS530BLP A L2	XS630B1P A L2
		connector	XS518BLP A M12	XS618B1P A M12	XS530BLP A M12	XS630B1P A M12
	NPN	cable	XS518BLN A L2	XS618B1N A L2	XS530BLN A L2	XS630B1N A L2
		connector	XS518BLN A M12	XS618B1N A M12	XS530BLN A M12	XS630B1N A M12
DC2	cable	XS518B1D A L2	XS618B1D A L2	XS530B1D A L2	XS630B1D A L2	
	connector	XS518B1D A M12	XS618B1D A M12	XS530B1D A M12	XS630B1D A M12	
AC/DC	cable	XS518B1M A L2	XS618B1M A L2	XS530B1M A L2	XS630B1M A L2	
	connector	XS518B1M A U20	XS618B1M A U20	XS530B1M A U20	XS630B1M A U20	
Output function	NO		A	A	A	A
	NC		B	B	B	B

Accessories






M8	XSZB108
M12	XSZB112
M18	XSZB118
M30	XSZB130

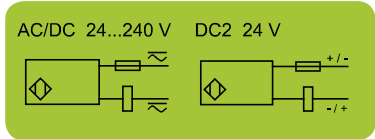


			80x80x26 mm	Cubic	40x40x117 mm	Flush mountable	Non flush mountable		
Sensing distance			40 mm			20 mm	40 mm		
DC3	PNP	cable	XS7D1A1P A L2		NO+NC	XS8C2A1PCM12	XS8C2A4PCM12		
		connector	XS7D1A1P A M12			XS8C2A1NCM12	XS8C2A4NCM12		
	NPN	cable	XS7D1A1N A L2			NO	XS8C2A1DAM12	XS8C2A4DAM12	
		connector	XS7D1A1N A M12			NO	XS8C2A1MAU20	XS8C2A4MAU20	
DC2	cable	XS7D1A1D A L2		DC4 PNP	NO+NC	XS8C4A1PCP20	XS8C4A4PCP20		
	connector	XS7D1A1D A M12			NO+NC	XS8C4A1NCP20	XS8C4A4NCP20		
AC/DC	DC2	cable	XS7D1A1D A L2		NO or NC	XS8C4A1DPP20	XS8C4A4DPP20		
		connector	XS7D1A1D A M12			NO or NC	XS8C4A1MPP20	XS8C4A4MPP20	
	AC/DC	cable	XS8D1A1M A L2			DC3 24 V	NO or NC		DC4 24 V
		connector	XS8D1A1M A U20						
Output function	NO		A						
	NC		B						

Accessories

For 26x26	XSZBE00	XSZBE90
For 40x40	XSZBC00	XSZBC90

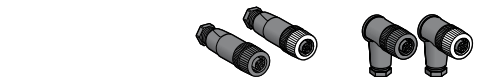


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Cabling XS

		PUR pre wired connectors (female)*		
M12		straight	elbowed	elbowed PNP LED
4 pin	2 m	XZCP1141L2	XZCP1241L2	XZCP1340L2
	5 m	XZCP1141L5	XZCP1241L5	XZCP1340L5
	10 m	XZCP1141L10	XZCP1241L10	XZCP1340L10



		Connectors (female)	
M12		straight	elbowed
4 pin	(1)	XZCC12FDM40B	XZCC12FCM40B
	(2)	XZCC12FDP40B	XZCC12FCP40B

(1) Steel ring (2) Plastic ring

*For a PVC cable, add the letter V after the P. Example: XZCPxxxxx become XZCPVxxxxx

Photo-electrics: OsiSense XU

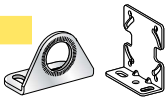


		Sensing distance			Compact 50x50 mm				Compact 92x71 mm					
	1 m	DC3	PNP	cable	XUK5AP A NL2	2.1 m	DC3	PNP	terminals	XUX5AP A NT16				
				connector 4P	XUK5AP A NM12				connector 4P	XUX5AP A NM12				
			NPN	cable	XUK5AN A NL2			NPN	terminals	XUX5AN A NT16				
				connector 4P	XUK5AN A NM12				connector 4P	XUX5AN A NM12				
			AC/DC	Relay	cable			XUK5ARCNL2	AC/DC	Relay	terminals	XUX5ARCNT16		
			Output function		NO			A				A		
		NC		B				B						
	5 m	DC3	PNP	cable	XUK9AP A NL2	11 m	DC3	PNP	terminals	XUX9AP A NT16				
				connector 4P	XUK9AP A NM12				connector 4P	XUX9AP A NM12				
			NPN	cable	XUK9AN A NL2			NPN	terminals	XUX9AN A NT16				
				connector 4P	XUK9AN A NM12				connector 4P	XUX9AN A NM12				
			AC/DC	Relay	cable			XUK9ARCNL2	AC/DC	Relay	terminals	XUX9ARCNT16		
			Accessory: Reflector					XUZC50				XUZC50		
	7 m	DC3	PNP	cable	XUK1AP A NL2	14 m	DC3	PNP	terminals	XUX1AP A NT16				
				connector 4P	XUK1AP A NM12				connector 4P	XUX1AP A NM12				
			NPN	cable	XUK1AN A NL2			NPN	terminals	XUX1AN A NT16				
				connector 4P	XUK1AN A NM12				connector 4P	XUX1AN A NM12				
			AC/DC	Relay	cable			XUK1ARCNL2	AC/DC	Relay	terminals	XUX1ARCNT16		
			Accessory: Reflector					XUZC50				XUZC50		
	30 m	DC3	PNP	cable	XUK2AP A NL2R	40 m	DC3	PNP	terminals	XUX2AP A NT16R				
				connector 4P	XUK2AP A N M12R				connector 4P	XUX2AP A NM12R				
			NPN	cable	XUK2AN A NL2R			NPN	terminals	XUX2AN A NT16R				
				connector 4P	XUK2AN A NM12R				connector 4P	XUX2AN A NM12R				
			Accessory: Transmitter		cable			XUK2AKSNL2T		terminals		XUX0AKSAT16T		
					connector 4P			XUK2AKSNM12T		connector 4P		XUX0AKSAM12T		
AC/DC	Relay	cable	XUK2ARCNL2R	AC/DC	Relay	terminals	XUX2ARCNT16R							
		cable		XUK2ARCNL2T		terminals		XUX0ARCTT16T						

Multimode		DC3 PNP/NPN		cable		XUK0AKSAL2		DC3 PNP/NPN		terminals		XUX0AKSAT16				
	Background suppression (BGS)	Diffuse (D)	AC/DC	Relay	cable	XUK0ARCTL2	Background Suppression: 0.28 m	Diffuse: 0.8 m	AC/DC	Relay	terminals	XUX0ARCTT16				
													Polarised reflex (P)	Thru-beam (TB)	Background Suppression: 1.3 m	Diffuse: 2 m
Accessory: Transmitter		DC	cable	XUK0AKSAL2T	DC	terminals	XUX0AKSAT16T									
		AC/DC	connector 4P	XUK0AKSAM12T	AC/DC	connector 4P	XUX0AKSAM12T									
		AC/DC	cable	XUK0ARCTL2T	AC/DC	terminals	XUX0ARCTT16T									

Other fixings

Single bracket

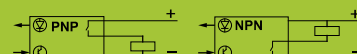


standard

with ball joint

XUB	XUZA118 (stainless steel)	XUZA218 (plastic)
XUM	XUZAM02	-
XUK	XUZA51	-
XUX	XUZX2000	-

DC3 24 V

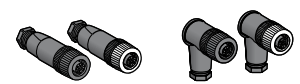


AC/DC Relay 24...240 V



PUR pre wired connectors (female)*

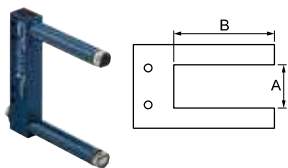
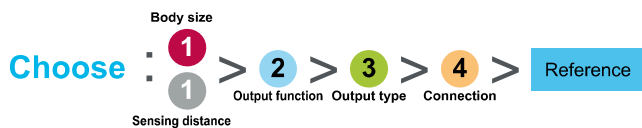
M12		straight		
		straight	elbowed	elbowed PNP LED
4 pin	2 m	XZCP1141L2	XZCP1241L2	XZCP1340L2
	5 m	XZCP1141L5	XZCP1241L5	XZCP1340L5
4 pin (1)	2 m	XZCP1141L2	XZCP1241L2	XZCP1340L2
	5 m	XZCP1141L5	XZCP1241L5	XZCP1340L5



Connectors (female)

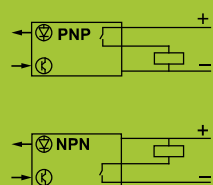
M12		straight	
		straight	elbowed
4 pin (1)	2 m	XZCC12FDM40B	XZCC12FCM40B
	4 pin (2)	XZCC12FDP40B	XZCC12FCP40B

Forks: OsiSense XUV



			A: 50 mm / B: 60 mm	A: 80 mm / B: 60 mm	A: 120 mm / B: 120 mm	A: 180 mm / B: 120 mm
DC3	PNP	M8 3 pin	XUVR0605P A NM8	XUVR0608P A NM8	XUVR1212P A NM8	XUVR1218P A NM8
	NPN	M8 3 pin	XUVR0605N A NM8	XUVR0608N A NM8	XUVR1212N A NM8	XUVR1218N A NM8
Output function		NO	A		A	A
		NC	B		B	B

DC3 24 V

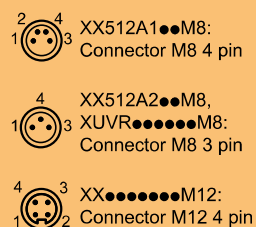


Cabling XX & XUV



		PUR pre wired connectors (female)*			Connectors (female)		
M8		straight	elbowed	elbowed PNP LED	M12	straight	elbowed
3 pin	2 m	XZCP0566L2	XZCP0666L2		(1) 4 pin	XZCC12FDM40B	XZCC12FCM40B
	5 m	XZCP0566L5	XZCP0666L5		(2) 4 pin	XZCC12FDP40B	XZCC12FCP40B
	10 m	XZCP0566L10	XZCP0666L10				
4 pin	2 m	XZCP0941L2	XZCP1041L2				
	5 m	XZCP0941L5	XZCP1041L5				
	10 m	XZCP0941L10	XZCP1041L10				
M12					Connectors (male)		
4 pin	2 m	XZCP1141L2	XZCP1241L2	XZCP1340L2	M12	straight	elbowed
	5 m	XZCP1141L5	XZCP1241L5	XZCP1340L5	4 pin	XZCC12MDM40B	XZCC12MCM40B
	10 m	XZCP1141L10	XZCP1241L10	XZCP1340L10	5 pin	XZCC12MDM50B	XZCC12MCM50B

(1) Steel ring (2) Plastic ring



*For a PVC cable, add the letter V after the P. Example: XZCPxxxxx become XZCPVxxxxx

For more information on Detection components, please connect to website: www.tesensors.com

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