

- Enclosed Motor Starters
- Open Star-Delta Starters
- Switch Disconnectors

Premium motor starters and controlgear assemblies suitable for use in every industrial environment



EMS offer a comprehensive product portfolio from switchgear components to type tested low voltage distribution and motor controlgear assemblies, to a diversified customer base including end-users, OEMs, electrical contractors and wholesalers.

EMS work closely with Eaton along with a growing local/national supplier base, which provide consistently high quality materials and components. In turn this has allowed EMS to provide excellent ongoing service to their customers.

Our aim, in working in partnership with Eaton, is to provide an efficient, cost effective service, based upon safety, quality and reliability.

EMS's comprehensive range of Eaton's enclosed starters and switchgear assemblies have been designed to meet the specific needs of the UK market.

To satisfy the requirements of most operating environments, they are available in insulated stainless and sheet steel enclosures in a variety of sizes.

Features and benefits

- IP65/55 degree of protection
- Capable of a high number of operations, the range offers proven reliability plus a long operating life
- All starters are constructed from standard Eaton components, making them very easy to maintain



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- IP65 degree of protection for insulated & stainless steel enclosed starters, IP55 for sheet steel.
- Surface mounting
- Single phase or three phase
- Main isolator padlockable in off position
- Metric knockouts for cable entry and ease of assembly
- Alternative voltages available (i.e. 24V DC, 110V)



Insulated enclosure – DOL – compact

Power rating (kW)	Dimensions (WxHxD) mm	List number without isolator ¹⁾
4	100x180x100	D4E/I2/3P+N-UK D4E/I2/3P-UK D4E/I2/1P+N-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XDP4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.



Insulated enclosure – DOL

Power rating (kW)	Dimensions (WxHxD) mm	List number without isolator	List number with isolator ¹⁾
4	120x220x125	XD4/I-UK	XDP4/I-UK
5.5	120x220x125	XD5.5/I-UK	XDP5.5/I-UK
7.5	120x220x125	XD7.5/I-UK	XDP7.5/I-UK
11	160x240x160	XD11/I-UK	XDP11/I-UK
15	160x240x160	XD15/I-UK	XDP15/I-UK
18.5	375x250x175	XD18.5/I-UK	XDP18.5/I-UK
22	375x250x175	XD22/I-UK	XDP22/I-UK
30	375x250x175	XD30/I-UK	XDP30/I-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XDP4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.



Insulated enclosures – DOL reversing

Power rating (kW)	Dimensions (WxHxD) mm without isolator	Dimensions (WxHxD) mm with isolator	List number without isolator	List number with isolator ¹⁾
4	160x240x160	200x280x160	XDR4/I-UK	XDRP4/I-UK
5.5	160x240x160	200x280x160	XDR5.5/I-UK	XDRP5.5/I-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XDP4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.



Insulated enclosures – star delta

Power rating (kW)	Dimensions (WxHxD) mm without isolator	Dimensions (WxHxD) mm with isolator	List number without isolator	List number with isolator ¹⁾
5.5	200x280x160	375x250x175	XSD5.5/I-UK	XSDP5.5/I-UK
7.5	200x280x160	375x250x175	XSD7.5/I-UK	XSDP7.5/I-UK
11	200x280x160	375x250x175	XSD11/I-UK	XSDP11/I-UK
15	200x280x160	375x250x175	XSD15/I-UK	XSDP15/I-UK
22	375x250x175	375x375x175	XSD22/I-UK	XSDP22/I-UK
30	375x250x175	375x375x175	XSD30/I-UK	XSDP30/I-UK
37	375x375x225	375x375x225	XSD37/I-UK	XSDP37/I-UK
45	375x375x225	375x375x225	XSD45/I-UK	XSDP45/I-UK
55	375x375x225	375x500x225	XSD55/I-UK	XSDP55/I-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XDP4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.



Steel enclosure – DOL

Power rating (kW)	Dimensions (WxHxD) mm without isolator	Dimensions (WxHxD) mm with isolator	List number without isolator ¹⁾	List number with isolator ¹⁾
4	105x175x135	185x185x150	XD4/ST-UK	XDP4/ST-UK
5.5	105x175x135	185x185x150	XD5.5/ST-UK	XDP5.5/ST-UK
7.5	105x175x135	185x185x150	XD7.5/ST-UK	XDP7.5/ST-UK
11	185x185x150	185x185x150	XD11/ST-UK	XDP11/ST-UK
15	185x185x150	185x185x150	XD15/ST-UK	XDP15/ST-UK
18.5	300x300x200	300x300x200	XD18.5/ST-UK	XDP18.5/ST-UK
22	300x300x200	300x300x200	XD22/ST-UK	XDP22/ST-UK
30	300x300x200	300x300x200	XD30/ST-UK	XDP30/ST-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XDP4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.



Steel enclosure – DOL reversing

Power rating (kW)	Dimensions (WxHxD) mm without isolator	Dimensions (WxHxD) mm with isolator	List number without isolator ¹⁾	List number with isolator ¹⁾
4	185x185x150	285x185x150	XDRP4/ST-UK	XDRP4/ST-UK
5.5	185x185x150	285x185x150	XDRP5.5/ST-UK	XDRP5.5/ST-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XDRP4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.



Steel enclosure – star delta

Power rating (kW)	Dimensions (WxHxD) mm without isolator	Dimensions (WxHxD) mm with isolator	List number without isolator ¹⁾	List number with isolator ¹⁾
5.5	185x185x150	285x185x150	XSD5.5/ST-UK	XSDP5.5/ST-UK
7.5	185x185x150	285x185x150	XSD7.5/ST-UK	XSDP7.5/ST-UK
11	185x185x150	285x185x150	XSD11/ST-UK	XSDP11/ST-UK
15	185x185x150	285x305x150	XSD15/ST-UK	XSDP15/ST-UK
22	285x185x150	400x400x200	XSD22/ST-UK	XSDP22/ST-UK
30	285x185x150	400x400x200	XSD30/ST-UK	XSDP30/ST-UK
37	285x185x150	400x400x200	XSD37/ST-UK	XSDP37/ST-UK
45	285x185x150	400x400x200	XSD45/ST-UK	XSDP45/ST-UK
55	300x400x200	400x400x200	XSD55/ST-UK	XSDP55/ST-UK
75	400x500x200	600x600x200	XSD75/ST-UK	XSDP75/ST-UK
90	400x500x200	600x600x200	XSD90/ST-UK	XSDP90/ST-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XSD4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.



Stainless steel enclosure – DOL

Power rating (kW)	Dimensions (WxHxD) mm	List number without isolator ¹⁾	List number with isolator ¹⁾
4	180x180x140	XD4/SS-UK	XDP4/SS-UK
5.5	180x180x140	XD5.5/SS-UK	XDP5.5/SS-UK
7.5	180x180x140	XD7.5/SS-UK	XDP7.5/SS-UK
11	180x180x140	XD11/SS-UK	XDP11/SS-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XDP4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.



Stainless steel enclosure – DOL reversing

Power rating (kW)	Dimensions (WxHxD) mm without isolator	Dimensions (WxHxD) mm with isolator	List number without isolator ¹⁾	List number with isolator ¹⁾
4	180x180x140	285x185x150	XDR4/SS-UK	XDRP4/SS-UK
5.5	180x180x140	285x185x150	XDR5.5/SS-UK	XDRP5.5/SS-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XDP4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.



Stainless steel enclosure – star delta

Power rating (kW)	Dimensions (WxHxD) mm without isolator	Dimensions (WxHxD) mm with isolator	List number without isolator	List number with isolator ¹⁾
5.5	285x185x150	285x185x150	XSD5.5/SS-UK	XSDP5.5/SS-UK
7.5	285x185x150	285x185x150	XSD7.5/SS-UK	XSDP7.5/SS-UK
11	285x185x150	285x185x150	XSD11/SS-UK	XSDP11/SS-UK
15	285x185x150	285x285x150	XSD15/SS-UK	XSDP15/SS-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XDP4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.



Open Chassis – star delta, without isolator

Power rating (kW)	Dimensions (WxHxD)	List number with electrical + mechanical interlock ¹⁾
5.5	158x68x117	SDAINLM12-UK
7.5	158x68x117	SDAINLM16-UK
11	158x68x117	SDAINLM22-UK
15	158x85x138	SDAINLM30-UK
22	158x85x138	SDAINLM45-UK
30	158x85x138	SDAINLM55-UK
37	188x115x147	SDAINLM70-UK
45	188x115x147	SDAINLM90-UK
55	188x115x147	SDAINLM115-UK
75	308x314x183	SDAINLM140-UK
90	308x314x183	SDAINLM165-UK
110	308x314x183	SDAINLM200-UK
132	308x314x183	SDAINLM260-UK

¹⁾List number must be completed with control voltage, either "(230V50Hz,240V60Hz)" or "(400V50Hz,440V,60Hz)" for example **XDP4/I-UK(400V50Hz,440V60Hz)**.
Note: Overload relays must be ordered separately. See page 10 for a guide to overload relays.

- All Switches to IEC/EN 60204 & IEC/EN 60947
- Padlockable in the OFF position (using up to three padlocks) for safe and secure maintenance
- Additional switched Neutral contacts and auxiliary contacts available separately (applicable to P switches only)
- Available in sheet steel or stainless steel enclosures. For insulated enclosures, see Eaton's main catalogue, "Product Overview for Machinery".
- With high protection standard up to IP65, they can be used in most environments including food industry

Sheet steel enclosure – 3 pole, padlockable



Power rating (A)	IP rating	Dimensions (WxHxD) mm	List number
20	55	104x174x134	T0-2-1/ST/SVB-UK
25	55	104x174x134	P1-25/ST/SVB-UK
32	55	104x174x134	P1-32/ST/SVB-UK
63	55	184x184x149	P3-63/ST/SVB-UK
100	55	184x184x149	P3-100/ST/SVB-UK

Sheet steel enclosure – 6 pole + 1NO & 1NC auxiliary contacts



Power rating (A)	IP rating	Dimensions (WxHxD) mm	List number
20	55	104x174x134	T0-4-15682/ST/SVB-UK
32	55	184x284x149	T3-4-15682/ST/SVB-UK
63	55	184x284x149	T5B-4-15164/ST/SVB-UK
100	55	184x284x149	T5-4-15164/ST/SVB-UK

Stainless steel enclosure – switch disconnecter, 3 pole, padlockable



Power rating (A)	IP rating	Dimensions (WxHxD) mm	List number
20	65	104x107x134	T0-2-1/SS1/SVB-UK
25	65	104x107x134	P1-25/SS1/SVB-UK
32	65	104x107x134	P1-32/SS1/SVB-UK
63	65	184x184x149	P3-63/SS2/SVB-UK
100	65	184x184x149	P3-100/SS2/SVB-UK

Stainless steel enclosure – 6 pole + 1NO & 1NC auxiliary contacts



Power rating (A)	IP rating	Dimensions (WxHxD) mm	List number
20	65	160x170x100	T0-4-15682/SS1/SVB-UK
32	65	285x245x150	T3-4-15682/SS3/SVB-UK
63	65	285x245x150	T5B-4-15164/SS3/SVB-UK
100	65	285x245x100	T5-4-15164/SS3/SVB-UK

1.3

Industrial switchgear

Emergency stop control stations

- A316L stainless steel thickness 1.2mm protected to IP65
- Surface Mounting.
- 1 NC contact complies to IEC/EN 60947-5-1
- Earth terminal link included.
- M5 self-retaining stainless steel fixing screws.
- Emergency stop actuator – tamper proof – ISO 13850/EN
- Choose from either:
 - PL = Pull to release e.g. ENCES/SS/SM/PL
 - PLI = Pull to release – illuminated
 - TW = Twist to release
 - KS = Key to release
 - PS = Protective shroud
- With or without protective shroud.



Stainless steel enclosures

Dimensions
(WxHxD) mm

List number

100x100x85

ENCES/SS/SM/PL-UK



Stainless steel enclosures

Dimensions
(WxHxD) mm

List number

100x100x85

ENCES/SS/SM/PLI-UK



Stainless steel enclosures

Dimensions
(WxHxD) mm

List number

100x100x85

ENCES/SS/SM/TW-UK



Stainless steel enclosures

Dimensions
(WxHxD) mm

List number

100x100x85

ENCES/SS/SM/KS-UK



Stainless steel enclosures

Dimensions
(WxHxD) mm

List number

100x100x85

ENCES/SS/SM/PL/PS-UK



Stainless steel enclosures

Dimensions
(WxHxD) mm

List number

100x100x85

ENCES/SS/SM/PLI/PS-UK



Stainless steel enclosures

Dimensions
(WxHxD) mm

List number

100x100x85

ENCES/SS/SM/TW/PS-UK



Stainless steel enclosures

Dimensions
(WxHxD) mm

List number

100x100x85

ENCES/SS/SM/KS/PS-UK

To place an order, contact your local Key Dealer: www.eaton.uk.com/findadistributor



Steel enclosed switch fuse – 3 pole & Neutral complete with fuses

Power rating (A)	IP rating	Dimensions (WxHxD) mm	List number
32	55	300x400x200	QSA40N0-A3/ST/BS/IP55-UK
63	55	300x400x200	QSA63N0-A3/ST/BS/IP55-UK
100	55	300x500x200	QSA100N1-A4/ST/BS/IP55-UK
125	55	400x600x200	QSA125N1-B2/ST/BS/IP55-UK
160	55	400x600x200	QSA160N1-B2/ST/BS/IP55-UK
200	55	600x800x250	QSA200N-B2/ST/BS/IP55-UK
250	55	600x800x250	QSA250N-B4/ST/BS/IP55-UK
315	55	600x1000x250	QSA315N-B4/ST/BS/IP55-UK
400	55	800x1000x400	QSA400N-B4/ST/BS/IP55-UK
630	55	800x1000x400	QSA630N-C3/ST/BS/IP55-UK

Note: Also available in insulated or stainless steel enclosure combinations



Steel enclosed MCCBs – 3 pole & Neutral & 4 pole, 25kA

Power rating (A)	IP rating	Dimensions (WxHxD) mm	List number 3P	List number 4P
100	55	300x400x150	ENCCB/100/3-UK	ENCCB/100/4-UK
160	55	300x500x200	ENCCB/160/3-UK	ENCCB/160/4-UK
200	55	400x600x200	ENCCB/200/3-UK	ENCCB/200/4-UK
250	55	400x600x200	ENCCB/250/3-UK	ENCCB/250/4-UK
400	55	600x800x300	ENCCB/400/3-UK	ENCCB/400/4-UK
630	55	600x1000x300	ENCCB/630/3-UK	ENCCB/630/4-UK
800	55	800x1500x400	ENCCB/800/3-UK	ENCCB/800/4-UK

Note: Also available in insulated or stainless steel enclosure combinations



Steel enclosed heating contactor – 4 pole AC-1

Power rating (A)	IP rating	Dimensions (WxHxD) mm	List number
20	55	105x175x135	HC/ST/20A-UK
32	55	105x175x135	HC/ST/32A-UK
45	55	300x300x200	HC/ST/45A-UK
63	55	300x300x200	HC/ST/63A-UK
80	55	300x400x200	HC/ST/80A-UK
100	55	300x400x200	HC/ST/100A-UK
160	55	300x500x200	HC/ST/160A-UK

Note: Also available in insulated or stainless steel enclosure combinations



Steel enclosed lighting contactor – 4 pole AC-1

Power rating (A)	IP rating	Dimensions (WxHxD) mm	List number
20	55	105x175x135	LC/ST/20A-UK
32	55	105x175x135	LC/ST/32A-UK
45	55	300x300x200	LC/ST/45A-UK
63	55	300x300x200	LC/ST/63A-UK
80	55	300x400x200	LC/ST/80A-UK
100	55	300x400x200	LC/ST/100A-UK
160	55	300x500x200	LC/ST/160A-UK

Note: Also available in insulated or stainless steel enclosure combinations

Guide to overload relay selection for starters

DOL kW	Motor rating at AC-3, 400V For starter types Star-Delta kW	D4E...	XD(P)4-7,5 XDR(P)4-5,5 XSD(P)5,5-11 SDAINLM12-22	XD(P)11-15 XSD(P)15-30 SDAINLM30-55	XD(P)18,5-30 XSD(P)37-55 SDAINLM70-115	XSD(P)75-90 SDAINLM140-260
0.25	–	ZE-1	ZB12-1	–	–	–
0.37	–	ZE-1,6	ZB12-1,6	–	–	–
0.55	1.1	ZE-1,6	ZB12-1,6	–	–	–
0.75	1.5	ZE-2,4	ZB12-2,4	–	–	–
1.1	2.2	ZE-4	ZB12-4	–	–	–
1.5	3	ZE-4	ZB12-4	–	–	–
2.2	4	ZE-6	ZB12-6	–	–	–
3	5.5	ZE-9	ZB12-10	–	–	–
4	7.5	ZE-9	ZB12-10	–	–	–
5.5	–	–	ZB12-12	–	–	–
7.5	11	–	ZB12-16	–	–	–
11	15	–	–	ZB32-24	–	–
–	18.5	–	–	ZB32-24	–	–
–	22	–	–	ZB32-24	–	–
15	30	–	–	ZB32-32	–	–
18.5	37	–	–	–	ZB65-40	–
22	45	–	–	–	ZB65-57	–
30	–	–	–	–	ZB65-57	–
–	55	–	–	–	ZB65-65	–
–	75	–	–	–	–	ZB150-100
–	90	–	–	–	–	ZB150-100
–	110	–	–	–	–	ZB150-125
–	132	–	–	–	–	ZB150-150

Notes: 1. Always check motor rating plate for exact full load current.

2. Star-delta selection based on overload relay being mounted directly below main or delta contactor. Set the relay to 0.58 x rated motor current

Non standard combinations are available e.g.

- * Modified motor starters
- * Custom control panels
- * Fully assembled distribution boards
- * Complete design and support service

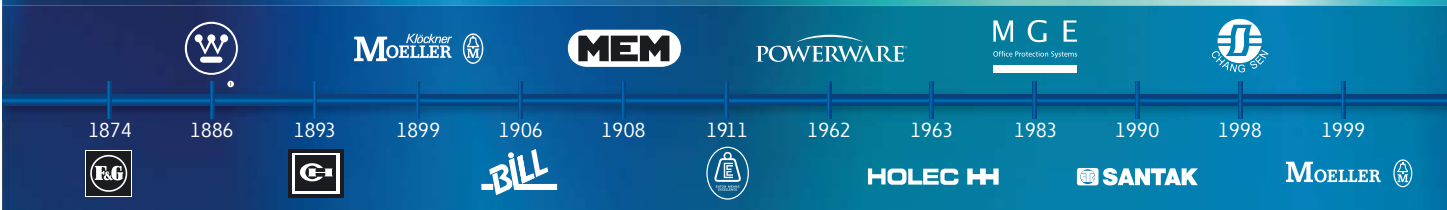


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At Eaton, we're energized by the challenge of powering a world that demands more. With over 100 years experience in electrical power management, we have the expertise to see beyond today. From groundbreaking products to turnkey design and engineering services, critical industries around the globe count on Eaton.

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