

## **Features**

- Full Text OLED Display
- i23 Smart Application Suite
- Event Logging
- Software for Commissioning, Logging and Troubleshooting
- Automatic Reset
- Fire mode
- Built in I<sup>2</sup>t Motor Overload Protection
- Optional Remote Display Keypad
- Suitable for single and 3-phase motors

# **RS PRO VMX-agility (17A-66A)**

RS Stock No.: 206-096, 206-098, 206-099, 206-101, 206-102, 206-103, 206-105



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## **Soft Starters**



#### **Product Description**

#### Agile Soft Starter:

- Reduce mechanical stress on your motor
- Suitable for fixed speed applications with the following pre-set applications built in:
   Agitator, Centrifugal Compressor Reciprocating Compressor, Rotary Screw Compressor,
   Rotary Vane Compressor, Scroll Compressor, Conveyor Loaded, Conveyor Unloaded,
   Crusher, Fan High Inertia, Fan Low Inertia, Grinder, Mill, Mixer, Moulding M/C, Press
   Flywheel, Submersible Pump, Centrifugal Pump, Rotodynamic Pump, Positive Displacement
   Pump, Reciprocating Pump, Rotary Pump, Pump Jack, Saw Band, Saw Circular, Screen
   Vibrating, Shredder, Woodchipper

#### **General Specifications**

Device Type	3-phase AC Semiconductor Agile Motor Controller			
Function	Soft Starter; Fixed Speed Control; Motor Control			
Current (400V / TC10)	17A, 22A, 29A, 35A, 41A, 55A, 66A			
Power Rating (400V / TC10)	7.5kW, 11kW, 15kW, 18.5kW, 22kW, 30kW, 37kW			
Screen	OLED			
External Keypad - options	Yes - IP54 or IP65 via Cat5e/Cat6			
Bypass	Internally Bypassed			
Communications	Modbus RTU			
Data Logging	Event Logging			
Automatic Reset	Can be used to attempt restart following fault			
Upload / Download	Via USB Memory Stick			
Motor Protection	Full I <sup>2</sup> t Motor Overload with Thermal Memory			
Languages	English, French, German, Spanish, Portuguese, Italian.			

### **Mechanical Specifications**

Overall Dimensions	H181mm x W108mm x D148mm			
Weight	1.97kg			
Mounting Type	Panel			

# **Soft Starters**



Supply Phases	3-phase. Single-phase selectable.			
Supply Voltage	200VAC, 208VAC, 230VAC, 400VAC, 460VAC, 600VAC *			
Supply Frequency	45-65 Hz			
Control Voltage	24VDC standard, 110 / 230VAC with optional power supply *			
Input / Outputs	2 x Programmable Digital Inputs 2 x Programmable Digital Outputs			
Rated Starting Capability	Trip Class 10 - 3 x Motor Current for 23 secs - 3.5 x Motor Current for 17 secs  Trip Class 20 - 4 x Motor Current for 19 secs  Trip Class 30 - 4 x Motor Current for 29 secs			
Connection	In-Line			
Terminal Type	Cage Clamp			

\* +10% / -15%

## **Operation Environment Specifications**

Ambient Temperature	-20°C to +40°C up to +60°C with derating			
Storage Temperature	-20°C to +70°C			
Altitude	1000m above sea level. 2000m with derating			

## **Protection Category**

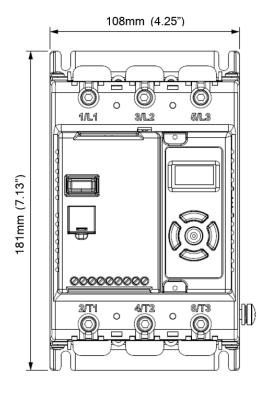
IP Rating	IP20 (with fingerguards)
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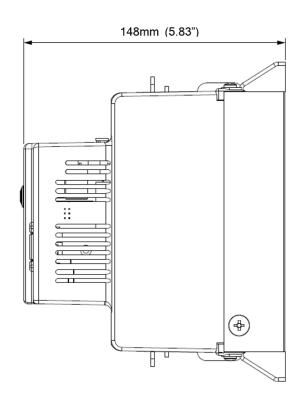


### **Approvals**

Standards	CE, UL, cUL
Legislation	<u>Directives:</u>
	2014/35/EU - Electrical equipment designed for use within certain
	voltage limits [Low Voltage Directive - LVD].
	2014/30/EU - Electromagnetic compatibility [EMC]
	2011/65/EU - Restriction of the use of certain hazardous substances in
	electrical and electronic equipment [RoHS] and amending Commission
	Delegated Directive (EU) 2015/863 with effect from 22 July 2019.
	Harmonised Standards:
	EN 60947-4-2:2012 - Low Voltage switchgear and controlgear. Part 4:
	Controlgear and motor-starters. Section 2. AC Semiconductor motor
	controllers and starters.
	EN IEC 63000: 2018 - Technical documentation for the assessment of
	electrical and electronic products with respect to RoHS.
Environmental	Products comply to RoHS and REACH

## **Dimensional Drawing**





## **Soft Starters**



## **Rated Power and Current**

					_				Chandard Duty	Madium Dute	Heavy Duby	
Step 1 - Select the application from the list and follow that column down.									Standard Duty  Default Agitator Compressor (Rotary Vane, Unloaded) Conveyor (Unloaded) Bow Thruster (Zero Pitch) Fan (Low Inertia <85A) Feeder (Screw) Lathe Machines Mixer (Unloaded) Moulding Machine Plastic and Textile Machines Pump - Submersible (Centrifugal, Rotodynamic) Saw (Band) Transformers or Voltage Regulators	Medium Duty  Heavy Compressor (Centrifugal, Reciprocating, Rotary Screw) Ball Mill Bow Thruster (Loaded) Conveyor (Loaded) Grinder Hammer Mill Mills (Flour etc) Mixer (Loaded) Pelletisers Press, Flywheel Positive Displacement Pump (Reciprocating, Rotary) Pump Jack Rolling Mill Roots Blower Saw (Circular) Screen - Vibrating Tumblers	Crusher Shredder Wood Chipper Fan (High Inertia >85A)  VMX-agility is not suitable for very high inertia loads such as centrifuges, loaded crushers or start times >30s.	
Step 2 - Confirm the rated starting capability of the soft start against the application.	Trip Class Rated Starting Capability Max Starts per Hour with Optional Cooling Fan								Trip Class 10 3x Motor Current - 23secs 3.5x Motor Current - 17secs 5 starts/hour See below	Trip Class 20 4x Motor Current - 19secs 5 starts/hour See below	Trip Class 30 4x Motor Current - 29secs 5 starts/hour -	
Step 3 - Consider the operating environment and make the model selection on a higher amp rating.						C	Operating Te	emperature	Standard operating height is 1000m, for every 100m increase motor Amps/kW by 1%, up to 2000m.  Example: For a 20A motor at 1500m make model selection based on 21A (5% higher)  Standard operating temperature is 40degC, for every 1degC above, increase motor Amps/kW by 2%, up to 60degC.  Example: For a 20A motor at 50degC make model selection based on 24A (20% higher)  Fit optional fan to increase maximum starts per hour. 206-096 to 206-105 up to 40 starts/hour			
	Motor Rating								Select Model 5 starts/hour @ 40°C	Select Model 5 starts/hour @ 40°C	Select Model 5 starts/hour @ 40°C	
Step 4 - Select your	17	4	7.5	7.5	17	5	10	15	206-096 (17A)	206-098 (22A)	206-099 (29A)	
motor Voltage and	22	5.5	11	11	22	7.5	15	20	206-098 (22A)	206-099 (29A)	206-101 (35A)	
Horsepower/kW and select model.	29	7.5	15	15	27	7.5	20	25	206-099 (29A)	206-101 (35A)	206-102 (41A)	
Sciedi model.	35	7.5	18.5	22	34 41	10	25	30	206-101 (35A)	206-102 (41A)	206-103 (55A)	
	<b>41</b> 11 22					10	30	40	206-102 (41A)	206-103 (55A)	206-105 (66A)	
	55 66	15 18.5	30 37	37	52 65	15 20	40 50	50 60	206-103 (55A)	206-105 (66A)		