MOTORTRONICS™
Solid State AC Motor Control

VMX-agility™
Application Driven Compact Soft Starter
200 - 600VAC, 17 - 361A, 3 - 350HP

IEC Rated Soft Starter

MOTORTRONICS™
Solid State AC Motor Control
VMX-agility ™

Application
Conveyor

modbus
rtu

24V 0V COM D1 D2 13 14 23 24

OLED
Display
Event History
with real-time
clock

6
Operation
Languages
to choose from

3S
Smooth start and
stop with stable
acceleration
and deceleration

OL
Motor Protection
with Thermal
Memory Feature

Connect
2 DI / 2 DO
Modbus RTU
USB

APPS
23 Pre-loaded
Applications
to choose from

Fire Mode
Continue running
to destruction
in Emergency
Situations

Bypass
Internal Bypass
is Standard on
all Sizes

Motortronics Motor Controls Made Easy

Full Featured – Compact - Application Driven

VMX-agility™ has been developed to exceed the exacting demands of industrial automation motor control clients. VMX-agility™ delivers stable, structured start and stop ramps for smooth, efficient performance. One standard frame size covers all typical applications from 3 -350 HP at 200 - 600 VAC.

Motor Overload Protection

Protecting the motor and soft starter in the event of an overload condition at full I^2t motor overload with intelligent thermal memory retention feature. Continually monitoring overloads to ascertain the reduction in motor heating levels even when VMX-agility™ is in the 'off' state. This is combined with protection and diagnostics giving the operator peace of mind while running the motor.

Event Logging

VMX-agility™ life event logging is a unique feature that records the last 1600 events to enable fast accurate fault analysis and their resolution. Recording multiple activities including start, stop, top of ramp, faults, application parameters (time, overload level, currents, frequency) and the device information. Event log can be downloaded via USB port or via the VMX-agility commisioning software.

Soft Stopping

Eliminate Water Hammer with Soft Stop Control. A gradual reduction in the output torque of your pump motor is provided when a stop signal is initiated. Check valves close gently and other fluid system components are no longer subjected to the shock and destructive potential of water hammer.

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1. **OLED display**
   Full text messages enabling fast programming and rapid fault finding with no codes and real-time value monitoring. Local display of recent logged events.

2. **Modbus RTU**
   Modbus RTU communications as standard. No optional communication cards required.

3. **USB Port**
   USB port for downloading event log and firmware updates.

More Design Features

Control Circuit
A standard 24 VDC control voltage supply with an optional power module which adapts the digital input voltage to accept a 110–230 VAC signal.

Lower Panel Production Costs
The VMX-agility™ uses one common unit frame size across the voltage range of 200–600 VAC facilitating efficient panel layout and interconnections to reduce material and panel production time.

Fire Mode
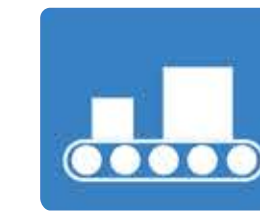External input signal overriding normal controls allowing the motor to continue running in emergency situations.

Start Delay Feature
Intentional start delay allowing pump actuators to engage before start.

Loss Reduction
An integral bypass is initiated at the top of ramp and reduces losses in the soft starter.
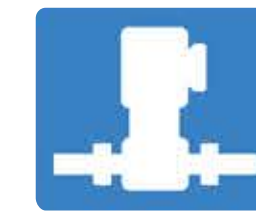
Number of Starts
Optional cooling fan for heavy duty applications with up to 40 starts per hour.

With 23 pre-programmed applications profiles, the VMX-agility™ offers a quick and comprehensive commission process. A typical VMX-agility™ setup takes less than 1 minute whereas a comparable competitive product setup could take anywhere from 60 to 120 minutes depending on the application. Access to an advanced setup menu is standard for special application requirements.

Typical Applications

| Conveyors | Pumps | Fans | Compressors | Crushers |

3S Technology

Automatic ramp control profiles ensure smooth start and stop performance, delivering stable acceleration and deceleration in all operating conditions.

Specifications

Operational Voltage	200 - 600 VAC
Rated Frequency	50 - 60 Hz ± 5 Hz
Index Rating	Trip Class 10: 3.5-17: 90-5 (Trip Class 20 & 30)
Starts per Hour Standard	5 starts/stops per hour (40 with Fan Option)
Internally Bypassed	Yes
Screen	OLED
Control Supply	Standard 24 VDC 110 to 230 VAC with Power Supply Option
Inputs	2 Digital Inputs, 1 Programmable
Overload	Full I2t Motor Overload with Memory
Communications	Modbus RTU
Full Logging functionality with commisioning software	YES
IP/NEMA rating	IP20/NEMA Class 1 (*with finger guard fitted)
Ambient Temperature	-4° ~ 104°F (-20 ~ 40°C) without de-rating 140°F (60°C) with de-rating
Standards	CE, UL, RCM
Languages	English, French, German, Spanish, Portuguese, Italian
Warranty	2 Years

VMX-agility™ Series

VMX-agility Options

Remote Display Keypad
Plug in remote mounting unit keypad mimics the agility™ display and keypad function.
IP65/NEMA Class 4X

Power Supply Unit Module
Unique to VMX-agility™ this module enables control voltage options in one standard product unit, no need to purchase separate soft starters for different control voltages.

Cooling Fan
For use in frequent duty applications with up to 40 starts per hour.

Rugged - Compact - Versatile

Ratings

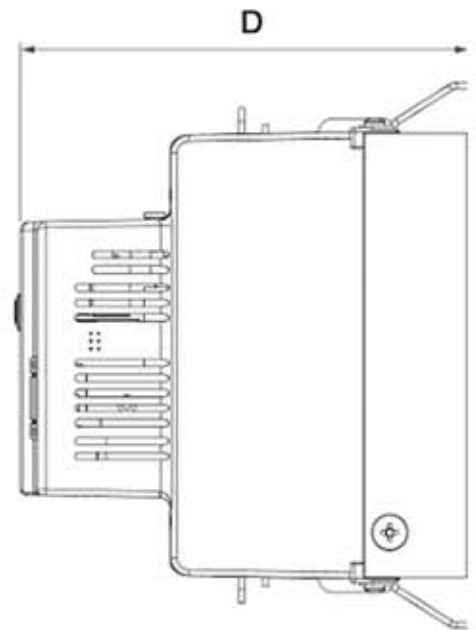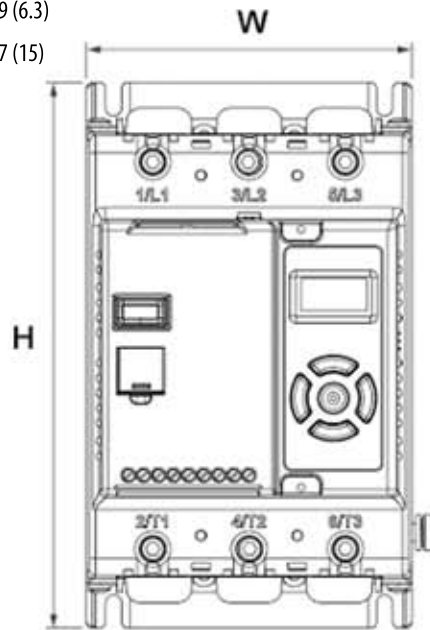| Model Number	Amps
VMX-AGY-101	17
VMX-AGY-103	22
VMX-AGY-105	27
VMX-AGY-107	34
VMX-AGY-109	41
VMX-AGY-111	52
VMX-AGY-113	65
VMX-AGY-201	77
VMX-AGY-203	100
VMX-AGY-205	125
VMX-AGY-207	156
VMX-AGY-209	192
VMX-AGY-301	242
VMX-AGY-303	302
VMX-AGY-305	361

Sizing Guide

Amps	Nominal Motor HP Rating 200V	208V	240V	480V	575V	Trip Class 10 AC-53a 3.5-17: 90-5[4]	Trip Class 20 AC-53a 4-19: 90-5[4]	Trip Class 30 AC-53a 4-29: 90-5[4]
17	3	5	5	10	15	-	-	VMX-AGY-101
17	3	5	5	10	15	-	VMX-AGY-101	VMX-AGY-103
17	3	5	5	10	15	VMX-AGY-101	VMX-AGY-103	VMX-AGY-105
22	5	5	7.5	15	20	VMX-AGY-103	VMX-AGY-105	VMX-AGY-107
27	7.5	7.5	7.5	20	25	VMX-AGY-105	VMX-AGY-107	VMX-AGY-109
34	10	10	10	25	30	VMX-AGY-107	VMX-AGY-109	VMX-AGY-111
41	10	10	10	30	40	VMX-AGY-109	VMX-AGY-111	VMX-AGY-113
52	15	15	15	40	50	VMX-AGY-111	VMX-AGY-113	VMX-AGY-201
65	20	20	20	50	60	VMX-AGY-113	VMX-AGY-201	VMX-AGY-203
77	20	25	25	60	75	VMX-AGY-201	VMX-AGY-203	VMX-AGY-205
100	30	30	30	75	100	VMX-AGY-203	VMX-AGY-205	VMX-AGY-207
125	40	40	40	100	125	VMX-AGY-205	VMX-AGY-207	VMX-AGY-209
156	50	50	60	125	150	VMX-AGY-207	VMX-AGY-209	VMX-AGY-301
192	60	60	60	150	200	VMX-AGY-209	VMX-AGY-301	VMX-AGY-303
242	75	75	75	200	250	VMX-AGY-301	VMX-AGY-303	VMX-AGY-305
302	100	100	100	250	300	VMX-AGY-303	VMX-AGY-305	-
361	125	125	150	300	350	VMX-AGY-305	-	-

Dimensions and Weights

Model Number	Dim. H x W x D inches (mm)	Weight lbs. (kg)
VMX-AGY-101 thru 113	7.13 (181) x 4.25 (108) x 5.83 (148)	4.34 (1.97)
VMX-AGY-201 thru 209	11.65 (296) x 5.78 (147) x 9.37 (238)	13.89 (6.3)
VMX-AGY-301 thru 305	19.29 (490) x 8.07 (205) x 13.03 (331)	33.07 (15)

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