

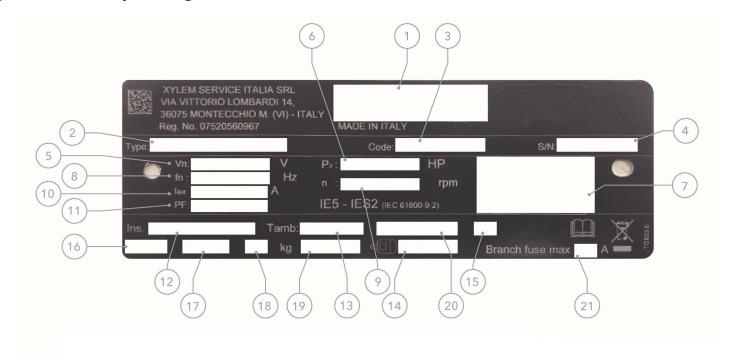


# hydrovar® X Smart Motor Specifications

EXM254-256/4.075DH4

7.5 HP, 1200-2000 RPM, 3PH, 60HZ, 380-480V 254-256 Frame, TEFC

#### hydrovar X Nameplate Legend



- 1. Certification markings (CE, UKCA, UL Recognized)
- 2. Motor type
- 3. Motor code
- 4. Unique motor serial number
- 5. Voltage range
- 6. Output power (kW / HP)
- 7. Full load rated PDS efficiency (motor and drive combined efficiency)
- 8. Frequency compatibility
- 9. Full load rated speed
- 10. Full load rated current range

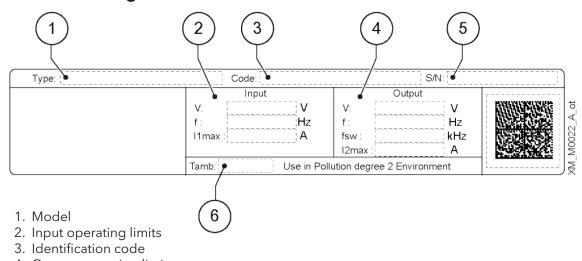
- 11. Power factor
- 12. Insulation class
- 13. Ambient operating temperature
- 14. Non-drive end bearing
- 15. Service factor
- 16. IP environmental protection rating
- 17. NEMA environmental protection rating
- 18. Weight
- 19. Drive end bearing
- 20. Duty cycle rating
- 21. Circuit protection requirement

#### hydrovar X Nameplate Information (representative example)\*



<sup>\*</sup>This is a representative example of the actual data that will be displayed on the Nameplate for the motor combination featured in this document.

#### hydrovar X Data Plate Legend



# 4. Output operating limits5. Serial number

- J. Seriai Humber
- 6. Room temperature range

## hydrovar X Data Plate Information (representative) image\*

Type: 10534398-0004	Code: 130141091		S/I	S/N: 93748WIQ00004			
XYLEM SERVICE ITALIA SRL		Input			Output		acceptant to the property as
VIA VITTORIO LOMBARDI 14,	V:	3 ~ 200 - 480	V	V:	0 ÷ VIn	٧	Wight party
36075 MONTECCHIO M. (VI) - ITALY	f:	50 / 60	Hz	f:	0 ÷ 133	Hz	Acres 18
Reg. No. 07520560967	I1max:	50	A	fsw:	2 ÷ 8	kHz	
MADE IN GERMANY C SUS				I2max:	60	Α	1 To 1
GERMANY C E529771	Tamb:	-20 ÷ 50°C	Use in	Pollution (	degree 2 Envi	ronment	ALWAND TO

 $<sup>\</sup>mbox{^*}\mbox{Data}$  Plate contains values for the motor combinations specified in this document.

# Motor Type: EXM254-256/4.075DH4

NEMA Frame	Part Number	Weight Ibs (kg)
254-256T	130637250	143 (65)
254-256TC	130637290	148 (67)
254-256JM		148 (67)
254-256JM (footed)	130637330	148 (67)

## **Combined Motor and Drive Specifications**

Description	Value				
Motor HP	7.5				
Enclosure	TEFC				
Frame Material	Cast Iron/Aluminum				
Nominal Voltage @ Frequency	460V @ 60Hz				
XP Class	None				
XP Division	Not Applicable				
Agones Amprovala	UL	CE			
Agency Approvals	FCC	UKCA			
Insulation Class	F				
Bearing Grease Type	Polymer 400				
Lifting Lugs	Standard				
Voltage	380-480 V (+/- 10%)				
Phase	3				
Input Current (380-480V)	15.3-13.6 A				
Power Factor	0.55				
	IP55				
Enclosure Rating	NEMA4				
	-4 to +122° F				
Tamb	-20 to +50° C				
DE Bearing	6310-ZZ				
ODE Bearing	6308-ZZ				
Duty Cycle	S1				

#### Combined Motor and Drive Performance (Nominal Voltage)<sup>1</sup>

Rated Speed	Torque (lb.ft)	Efficiency 100%	Efficiency 75%	Efficiency 50%	Sound Pressure dB(A) <sup>2</sup>
2000 RPM	19.37	91.0	91.1	90.4	54
1800 RPM	21.52	90.9	90.7	89.8	52
1500 RPM	25.82	88.6	88.6	87.9	49

 $<sup>^1</sup>$ Motor may operate below 1500 RPM at partial load. Efficiency represents PDS (power-drive-system) efficiency.

#### **Drive Features and Specifications**

Description	Value
Display	Graphic color display
Communication Protocols	MODBUS® RTU BACnet MS/TP
Mobile App	Bluetooth®
Control Modes	Actuator, Constant pressure, Proportional pressure, Proportional quadratic pressure, Constant flow, Constant temperature, Constant level
RS485 Ports	2
Analog Inputs	4
Analog Input Configuration	0-20 mA / 4-20 mA / 0-10V / 2-10V
Digital Inputs*	5
Analog Outputs	1
Analog Output Configuration	0-20 mA / 4-20 mA / 0-10V / 2-10V
Relay Output (Form C)*	2
10V Supply	1
Leakage Current	< 3.5 mA
Storage Temperature	-40 to +158° F -40 to +70° C
Altitude (without derating)	0 to 3281 ft [0-1000 m]
Humidity	Max 95% non-condensing

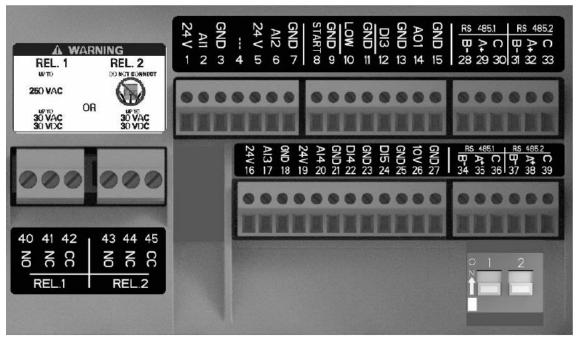
 $<sup>\</sup>mbox{\ensuremath{\,^\star}}$  See Auxiliary Connections data on the next page for more detail.

# hydrovar X with Feet



<sup>&</sup>lt;sup>2</sup>Sound power measured at 1m distance in no-load condition according to ISO 9614-2 and sound pressure values determined according to the ISO 11203 method. Sound pressure tolerance is +/- 2 dB for all voltages.

#### **Auxiliary Connections**



XM\_M0020\_A\_ph

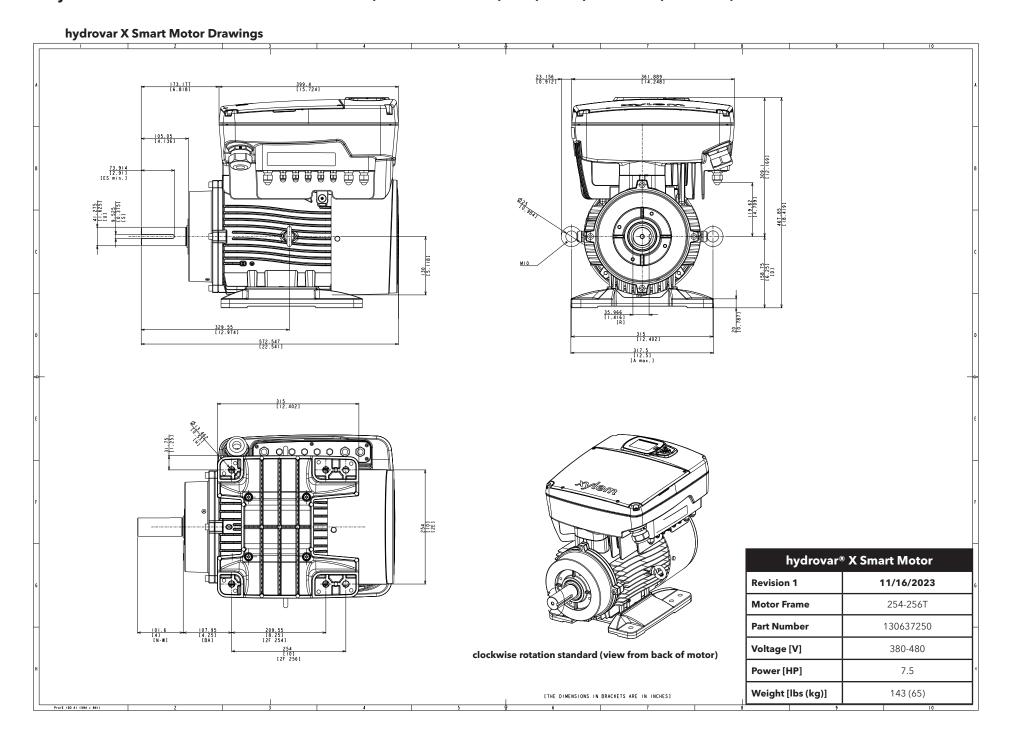
Position number	Name	Description	Default setting	
1		Power supply +24 VDC, max. 60 mA (total, terminals 1 + 5)		
2	Analog input 1	Configurable Analog input 1	Pressure sensor 1	
3	]	Electronic GND	<u>]</u>	
4	Reserved	For internal use, do not connect	-	
5		Power supply +24 VDC, max. 60 mA (total, terminals 1 + 5)		
6	Analog input 2	Configurable Analog input 2	Not selected	
7		Electronic GND	7	
8	External start/stop	Digital start/stop input, internal pull-up +24 VDC, contact current 6 mA	-	
9	·	Electronic GND	7	
10	External lack of water	Low water level digital input, internal pull-up +24 VDC, contact current 6 mA	-	
11		Electronic GND	7	
12	Digital Input 3	Configurable digital input 3, internal pull-up +24 VDC, contact current 6 mA	Emergency start at maximum	
13		Electronic GND	speed	
14		Configurable Analog output	NA . C . I	
15	Analog output	Electronic GND	Motor Speed	
16		Power supply +24 VDC, max. 60 mA (total, terminals 16 and 19)		
17	Analog input 3	Configurable Analog input 3	Not selected	
18	]	Electronic GND		

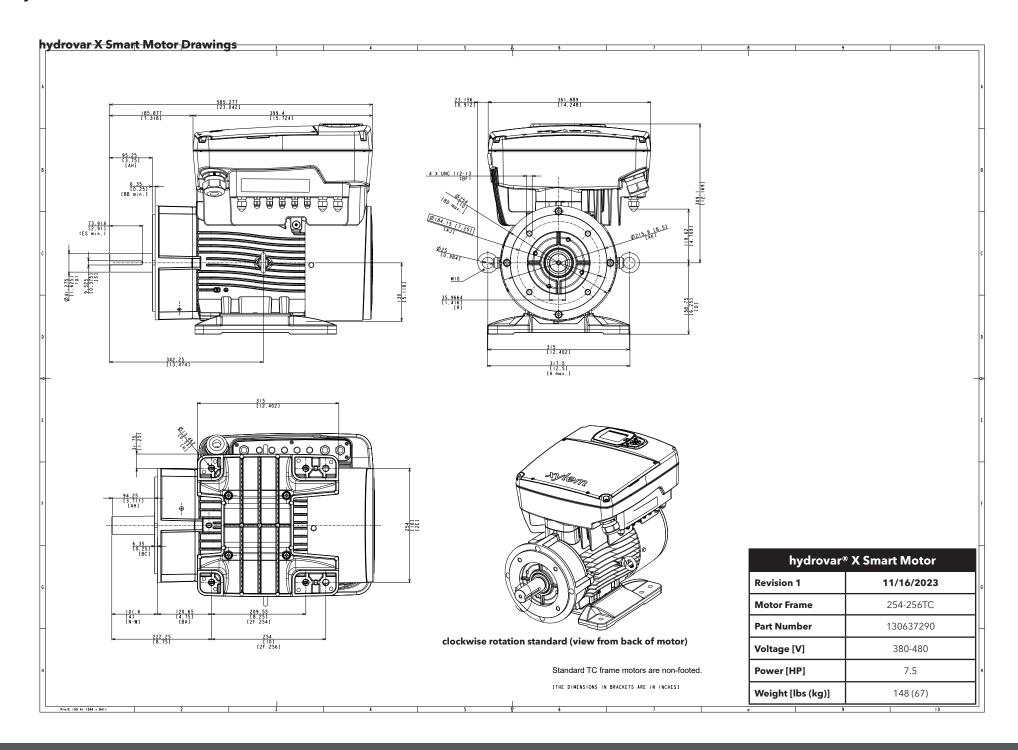
# hydrovar® X EXM254-256/4.075DH4 - 7.5 HP, 1200-2000 RPM, 3PH, 60HZ, 380-480V, 254-256, TEFC

# **Auxiliary Connections (Continued)**

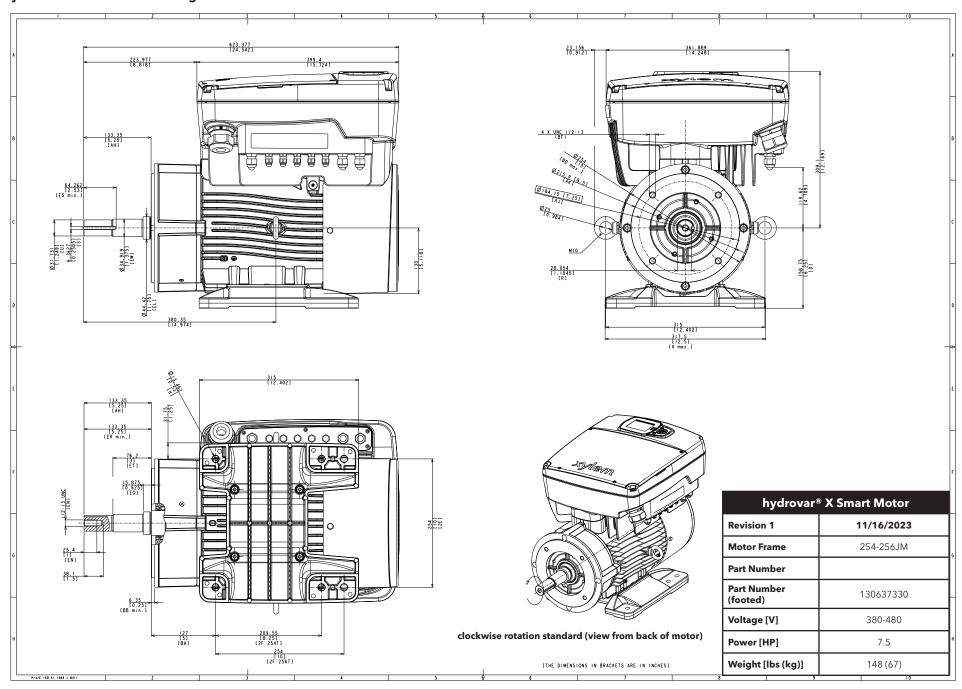
Position number	Name	Description	Default Setting
19		Power supply +24 VDC, max. 60 mA (total, terminals 16 and 19)	
20	Analog input 4	Configurable Analog input 4	Not selected
21		Electronic GND	
22	Digital input 4	Configurable digital input 4, internal pull -up +24 VDC, contact current 6mA	Not selected
23		Electronic GND	
24	Digital input 5	Configurable digital input 4, internal pull -up +24 VDC, contact current 6mA	Not selected
25		Electronic GND	
26	10.1/DC	Power supply +10 VDC, max. 3 mA	
27	10 VDC power supply	Electronic GND	-
28		RS485 port 1: RS485-1B N (-)	
29	Communication Bus 1	RS485 port 1: RS485-1A P (+)	Multipump
30		RS485 port 1: RS485-COM	
31		RS485 port 2: RS485-2B (-)	
32	Communication Bus 2	RS485 port 2: RS485-2A P (+)	MODBUS
33		RS485 port 2: RS485-COM	
34		RS485 port 1: RS485-1B N (-)	
35	Communication Bus 1	RS485 port 1: RS485-1A P (+)	Multipump
36		RS485 port 1: RS485-COM	
37		RS485 port 2: RS485-2B N (-)	
38	Communication Bus 2	RS485 port 2: RS485-2A P (+)	MODBUS
39		RS485 port 2: RS485-COM	
40		Configurable relay 1: normally open	
41	Relay 1	Configurable relay 1: normally closed	Error Reporting
42		Configurable relay 1: normally contact	
43		Configurable relay 2: normally open	
44	Relay 2	Configurable relay 2: normally closed	Motor start
45		Configurable relay 2: normally contact	

#### hydrovar® X EXM254-256/4.075DH4 - 7.5 HP, 1200-2000 RPM, 3PH, 60HZ, 380-480V, 254-256, TEFC





#### hydrovar X Smart Motor Drawings



hydrovar® X EXM254-256/4.075DH4 - 7.5 HP, 1200-2000 RPM, 3PH, 60HZ, 380-480V, 254-256, TEFC

**NOTES** 

# Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

For more information on how Xylem can help you, go to www.xylem.com

#### **Xylem Product Cybersecurity**

Xylem values your system security and the availability of your critical services. For more information on Xylem cybersecurity practices or to contact the cybersecurity team please visit www.Xylem.com/security.



Xylem Inc.

Phone: (866) 673-0428 Fax: (888) 322-5877 www.xylem.com

Xylem reserves the right to make modification without prior notice. Xylem and Hydrovar are registered trademark of Xylem Inc. or one of its subsidiaries. MODBUS is a registered trademark of Schneider Electric USA, Inc. The Bluetooth word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Xylem Inc. or one of its subsidiaries is under license. All other trademarks or registered trademarks are property of their respective owners.