

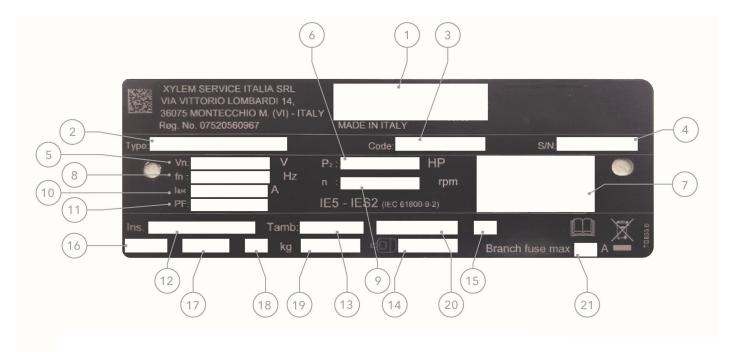


# hydrovar® X Smart Motor Specifications

EXM213-215/4.055CH4

5.5 HP, 1200-2000 RPM, 3PH, 60HZ, 380-480V 213-215 Frame, TEFC

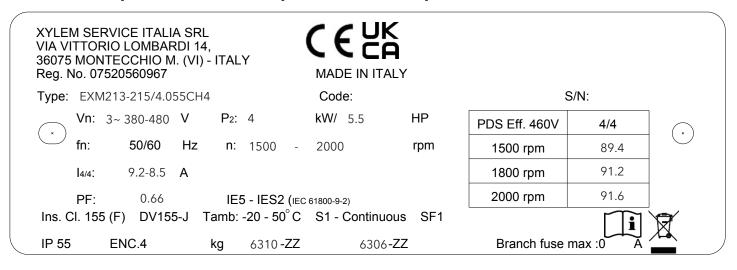
### hydrovar X Nameplate Legend



- 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

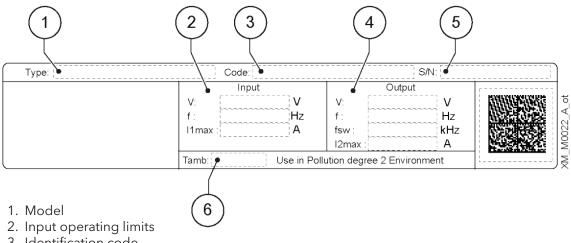
- 11. Power factor
- 12. Insulation class
- 13. Ambient operating temperature
- 14. Non-drive end bearing
- 15. Service factor
- 16. IP environmental protection rating
- 17. NEMA environmental protection rating
- 18. Weight
- 19. Drive end bearing
- 20. Duty cycle rating
- 21. Circuit protection requirement

# 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



- 3. Identification code
- 4. Output operating limits
- 5. Serial number
- 6. Room temperature range

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

Type: 10534396-0004	С	ode: 13014107	1		S/I	N: 93748W	/IM0000M
XYLEM SERVICE ITALIA SRL		Input			Output		apreciation per service
VIA VITTORIO LOMBARDI 14,	V:	3 ~ 200 - 480	٧	V:	0 ÷ VIn	٧	1
36075 MONTECCHIO M. (VI) - ITALY	f:	50 / 60	Hz	f:	0 ÷ 133	Hz	
Reg. No. 07520560967	I1max:	24	Α	fsw:	2 ÷ 12	kHz	2 4 4 1 7 A
MADE IN				I2max:	24	Α	
MADE IN GERMANY C F529771	Tamb:	-20 ÷ 50°C	Use in	Pollution	degree 2 Envi	ronment	SALES STATE

<sup>\*</sup>Data Plate contains values for the motor combinations specified in this document.

# Motor Type: EXM213-215/4.055CH4

NEMA Frame	Part Number	Weight lbs (kg)
213-215T	130636530	84 (38)
213-215TC	130636570	112 (51)
213-215JM	130636610	112 (51)
213-215JM (footed)	130638050	112 (51)

# **Combined Motor and Drive Specifications**

Description		Va	lue		
Motor HP	5.5				
Enclosure	TEFC				
Frame Material	Cast Iron/Aluminum				
Nominal Voltage @ Frequency	460V @ 60Hz				
XP Class	None				
XP Division	Not Applicable				
Assonate Amprentals	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)	9.2-8.5 A				
Power Factor	0.66				
	IP55				
Enclosure Rating	NEMA4				
Tamb	-4 to +122° F				
lamb	-20 to +50° C				
DE Bearing	6310-ZZ				
ODE Bearing	6306-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	14.09	91.6	91.5	90.8	55
1800 RPM	15.65	91.2	91.1	90.4	53
1500 RPM	18.78	89.4	89.4	88.8	48

<sup>&</sup>lt;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.

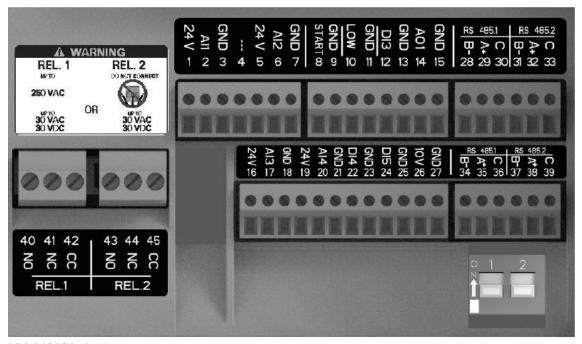
# hydrovar X with Feet



<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.

### hydrovar® X EXM213-215/4.055CH4 - 5.5 HP, 1200-2000 RPM, 3PH, 60HZ, 380-480V, 213-215, TEFC

### **Auxiliary Connections**



XM\_M0020\_A\_ph

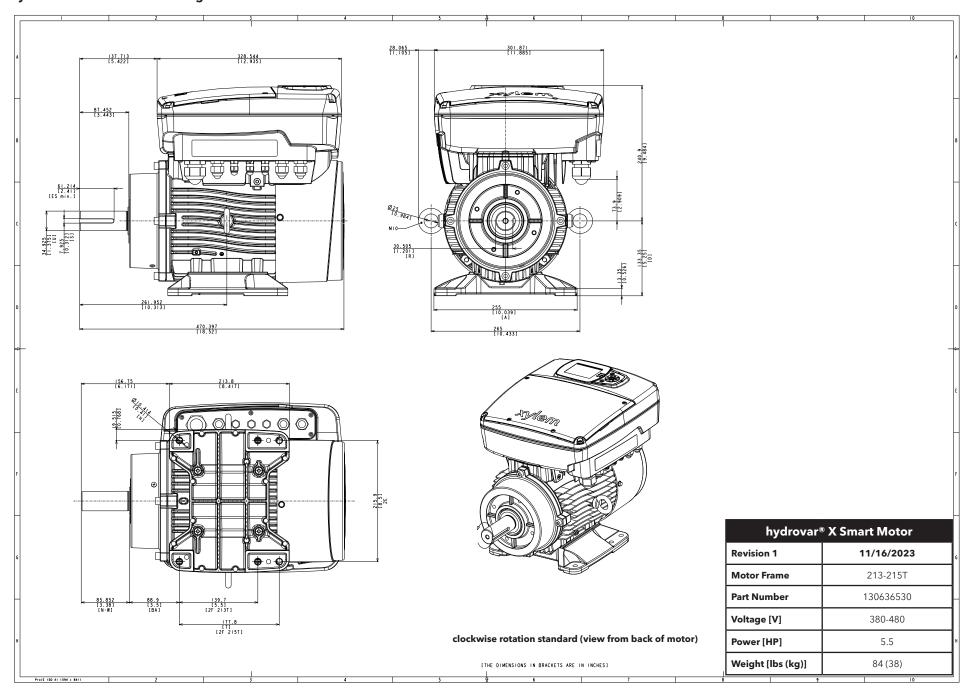
Position number	Name	Description	Default setting	
1		Power supply +24 VDC, max. 60 mA (total, terminals 1 + 5)		
2	Analog input 1 Configurable Analog input 1		Pressure sensor 1	
3	]	Electronic GND		
4	Reserved	For internal use, do not connect	-	
5		Power supply +24 VDC, max. 60 mA (total, terminals 1 + 5)		
6	Analog input 2	Configurable Analog input 2	Not selected	
7	]	Electronic GND		
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		
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	M	
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	1	Electronic GND		

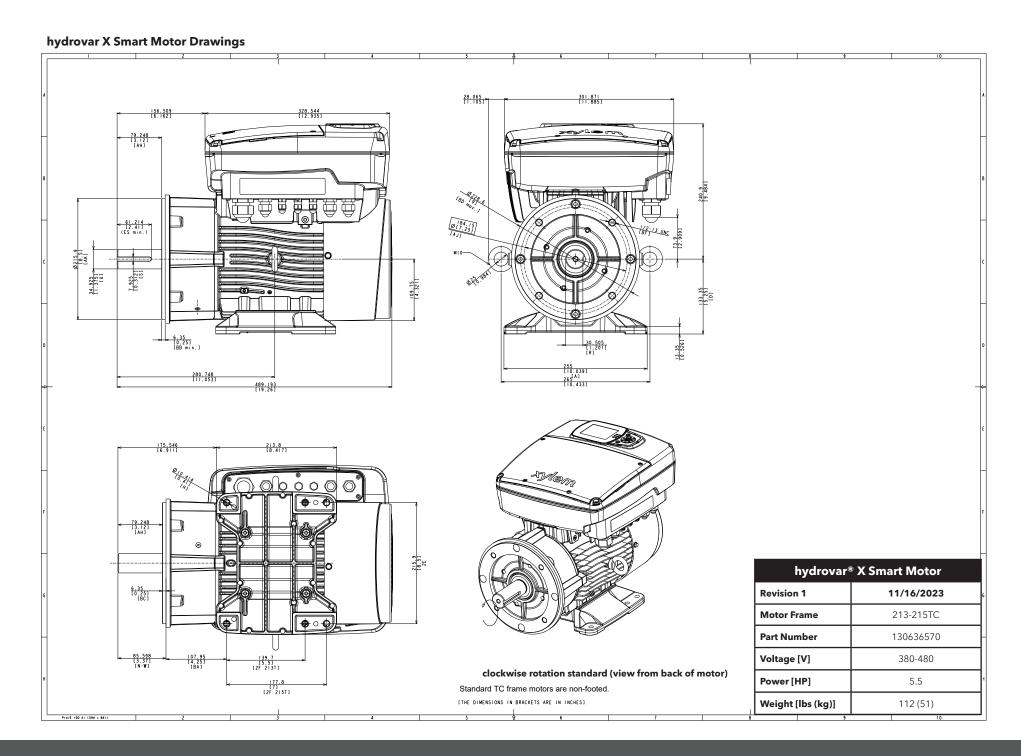
# hydrovar® X EXM213-215/4.055CH4 - 5.5 HP, 1200-2000 RPM, 3PH, 60HZ, 380-480V, 213-215, TEFC

# **Auxiliary Connections (Continued)**

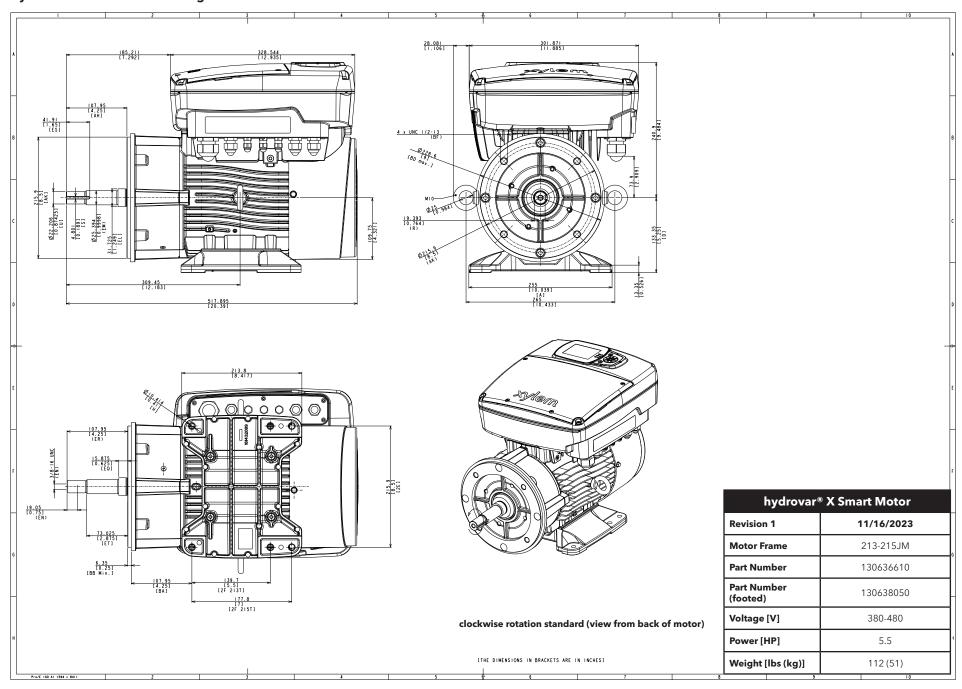
Position number	Name	Description	Default Setting
19		Power supply +24 VDC, max. 60 mA (total, terminals 16 and 19)	
20	Analog input 4	Configurable Analog input 4 Not select	Not selected
21		Electronic GND	
22	Digital input 4	Configurable digital input 4, internal pull -up +24 VDC, contact current 6mA	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	40.400	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 Smart Motor Drawings





### hydrovar X Smart Motor Drawings



hydrovar® X EXM213-215/4.055CH4 - 5.5 HP, 1200-2000 RPM, 3PH, 60HZ, 380-480V, 213-215, 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.

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### **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.



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