

# Submittal Data

PROJECT:	UNIT TAG:	QUANTITY:	
	TYPE OF SERVICE:		
REPRESENTATIVE:	SUBMITTED BY:	 DATE:	
ENGINEER:	APPROVED BY:	 DATE:	
CONTRACTOR:	ORDER NO.:	DATE:	

# CM 5-4 A-S-A-V-AQQV B-A-A-N

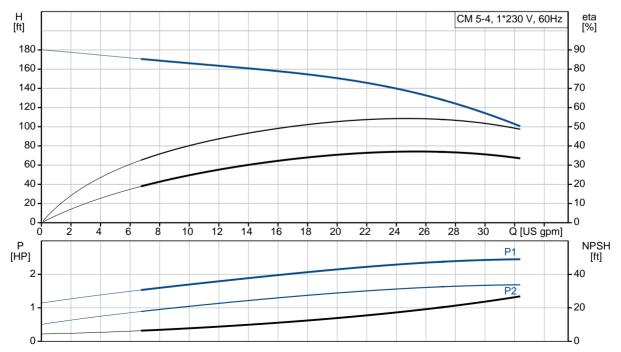
CM are reliable, quiet and compact horizontal end-suction pumps. The modular pump design makes it easy to make customised solutions. The CM pumps are available in cast iron and stainless steel

Product photo could vary from the actual product

Conditions of Service				
Flow:				
Head:				
Efficiency:				
Liquid:	Water			
Temperature:	68 °F			
NPSH required:	ft			
Viscosity:				
Specific Gravity:	1.000			

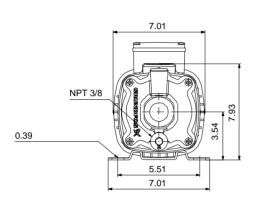
Pump Data				
Max pressure at stated temperature:	145 psi / 194 °F			
Liquid temperature range:	-4 194 °F			
Maximum ambient temperature:	131 °F			
Shaft seal:	AQQV			
Product number:	97568416			

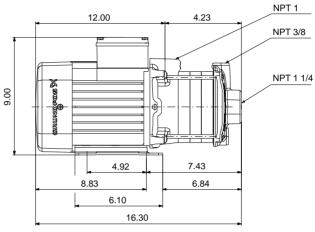
Motor Data				
Main frequency:	60 Hz			
Enclosure class:	IP55			

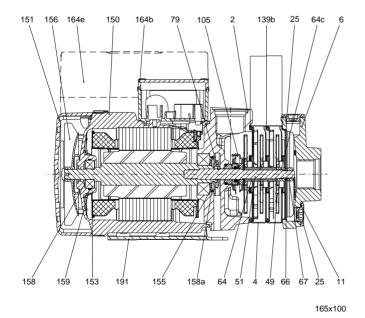




# Submittal Data







## Materials:

Pump housing: Cast iron

**ASTM A48-25A** 

Impeller: Stainless steel

**AISI 304** 

EN 1.4301

Material code: A Code for rubber: V



**Date:** 3/27/2020

Count | Description

CM 5-4 A-S-A-V-AQQV B-A-A-N



Product No.: 97568416

Compact, reliable, horizontal, multistage, end-suction centrifugal pump with axial suction port and radial discharge port. The shaft, impellers and chambers are made of stainless steel. The inlet and discharge parts are made of cast iron. The mechanical shaft seal is a special designed, unbalanced O-ring seal. Pipework connection is via internal NPT pipe threads.

The pump is fitted with a 1-phase, foot-mounted, fan-cooled asynchronous motor.

### Further product details

Pump and motor are integrated in a compact and user-friendly design. The pump is fitted to a low base plate, making it ideal for installation in systems where compactness is important.

The state-of-the-art design and materials of the shaft seal ensure high wear resistance, improved sticking and dry-running capabilities and long operating life.

Servicing the pump requires no special service tools. Service parts are in stock for quick delivery and are available as kits, single parts or bulk. Service videos are available on www.youtube.com.

### Pump

A combination of a stop ring and a Nord-lock® washer secures a tight and reliable fixation of the impeller spacing pipes to the splined pump shaft. It is possible to remove and fit the hydraulic parts from the pump side. The inlet part, chambers and discharge part are held together by four staybolts.

The pump is fitted with an unbalanced O-ring seal with a rigid torque-transmission system. It has a fixed seal driver ensuring a reliable rotation of all parts. The dynamic secondary seal is an O-ring.

### Primary seal:

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: silicon carbide (SiC)

This material pairing is used where higher corrosion resistance is required. The high hardness of this material pairing offers good resistance against abrasive particles.

Secondary seal material: FKM (fluorocarbon rubber)

FKM has excellent resistance to oils and chemicals. Above 90  $^{\circ}\text{C}$ , FKM should only be used in media without water.





**Date:** 3/27/2020

Count | Description

The pump shaft is connected to the motor shaft through a left thread and tight fit. The shaft cannot be dismantled.

**Motor** 

The motor is a totally enclosed, fan-cooled motor with principal dimensions to EN 50347. Electrical tolerances comply with EN 60034.

### **Technical data**

**Controls:** 

Frequency converter: NONE

Liquid:

Pumped liquid: Water
Liquid temperature range: -4 .. 194 °F
Selected liquid temperature: 68 °F
Density: 62.29 lb/ft³

Technical:

Pump speed on which pump data are based: 3480 rpm

Rated flow: 24.8 US gpm Rated head: 145 ft Code for shaft seal: AQQV

Curve tolerance: ISO9906:2012 3B

Materials:

Pump housing: Cast iron

EN-GJL-200 ASTM A48-25A

Impeller: Stainless steel

EN 1.4301 AISI 304

Installation:

Range of ambient temperature: -4 .. 131 °F Maximum operating pressure: 145.04 psi

Max pressure at stated temperature: 145 psi / 194 °F

145 psi / 194 °F

Type of connection: NPT(F)
Size of suction port: 1 1/4 inch
Size of outlet port: 1 inch
Outlet position: 12

Electrical data:

Motor standard: NEMA
Frame size: 90B
Rated power - P2: 2.01 HP
Main frequency: 60 Hz
Suitable for 50/60 Hz: N



**Date:** 3/27/2020

Phase: 1
Rated voltage: 115/230 V
Service factor: 1.00
Rated current: 18.8/9.8 A
Starting current: 400-400 %

Rated speed: 3360 rpm
Enclosure class (IEC 34-5): IP55
Insulation class (IEC 85): F
Built-in motor protection: NONE

Others:

**Description** 

Count

Terminal box position: 12
Minimum efficiency index, MEI ≥: 0.7
Net weight: 53.4 lb
Gross weight: 58.9 lb

Approvals: CE,CULUS,WRAS,ACS,TR,EAC,CURUS

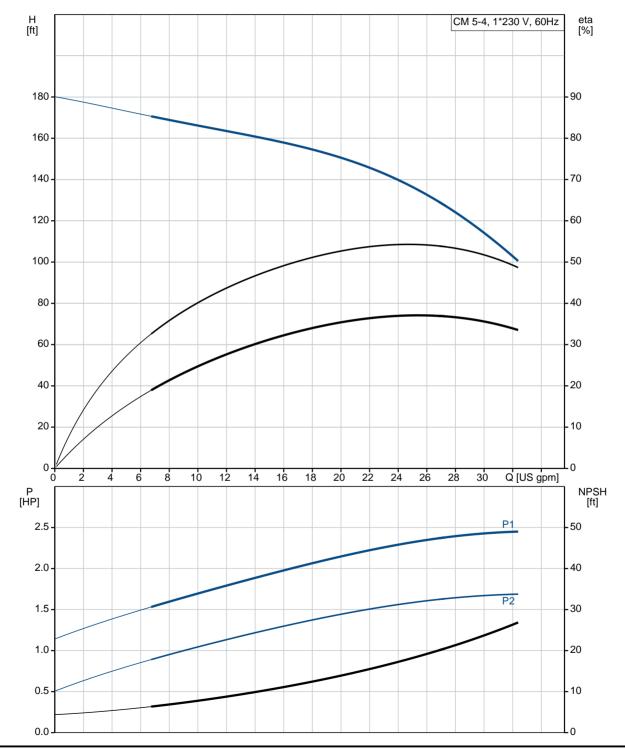
Country of origin: US

Custom tariff no.: 8413.70.2040



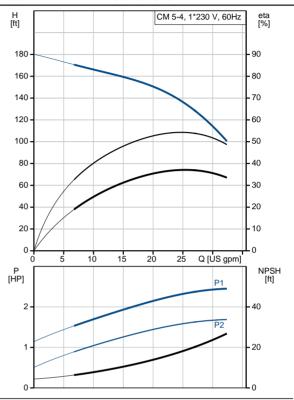
**Date:** 3/27/2020

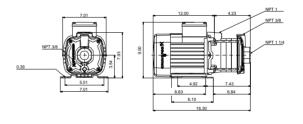
# 97568416 CM 5-4 A-S-A-V-AQQV B-A-A-N 60 Hz

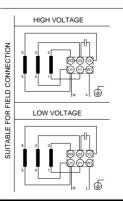




Description	Value
General information:	
Product name:	CM 5-4 A-S-A-V-AQQV B-A-A-N
Product No.:	97568416
EAN:	5700318669771
	5700318669771
Technical:	
Pump speed on which pump lata are based:	3480 rpm
Rated flow:	24.8 US gpm
Rated head:	145 ft
mpellers:	4
Code for shaft seal:	AQQV
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	A
Materials:	
Pump housing:	Cast iron
, <del>y</del>	EN-GJL-200
	ASTM A48-25A
mpeller:	Stainless steel
<u>.</u>	EN 1.4301
	AISI 304
Material code:	A A
Code for rubber:	V
nstallation:	<b>v</b>
Range of ambient	
emperature:	-4 131 °F
Maximum operating pressure:	145.04 psi
Max pressure at stated emperature:	145 psi / 194 °F
	145 psi / 194 °F
Type of connection:	NPT(F)
Size of suction port:	1 1/4 inch
Size of outlet port:	1 inch
Outlet position:	12
Connect code:	S
iquid:	
Pumped liquid:	Water
iquid temperature range:	-4 194 °F
Selected liquid temperature:	68 °F
Density:	62.29 lb/ft <sup>3</sup>
Electrical data:	
Motor standard:	NEMA
rame size:	90B
	~~~







2.01 HP

60 Hz

Ν

Rated power - P2:

Suitable for 50/60 Hz:

Main frequency:

Phase:



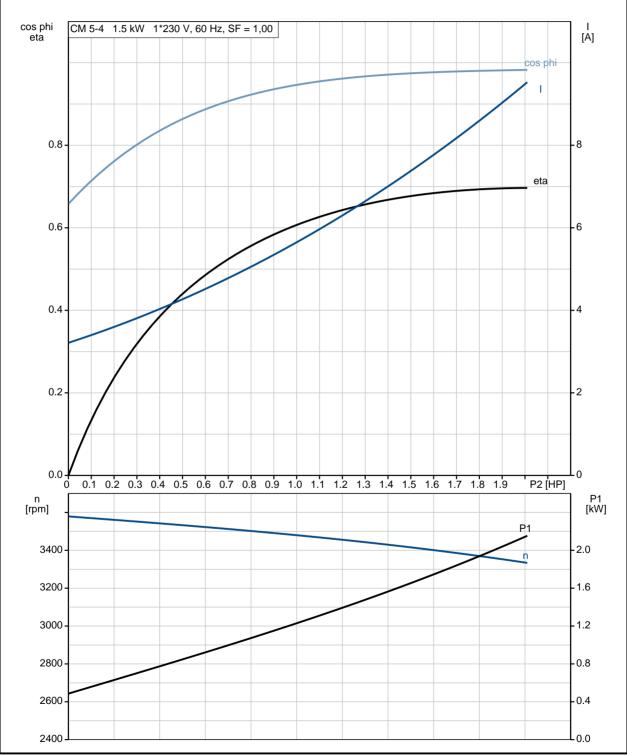
**Date:** 3/27/2020

Description	Value
Description	
Rated voltage:	115/230 V
Service factor:	1.00
Rated current:	18.8/9.8 A
Starting current:	400-400 %
Rated speed:	3360 rpm
Enclosure class (IEC 34-5):	IP55
Insulation class (IEC 85):	F
Built-in motor protection:	NONE
Controls:	
Frequency converter:	NONE
Others:	
Terminal box position:	12
Minimum efficiency index, MEI ≥:	0.7
Net weight:	53.4 lb
Gross weight:	58.9 lb
Approvals:	CE,CULUS,WRAS,ACS,TR,E AC,CURUS
Country of origin:	US
Custom tariff no.:	8413.70.2040



**Date:** 3/27/2020

# 97568416 CM 5-4 A-S-A-V-AQQV B-A-A-N 60 Hz

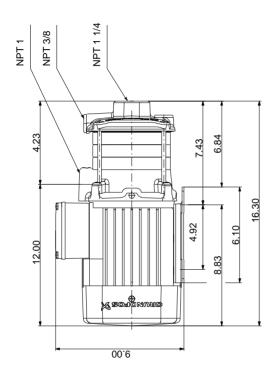


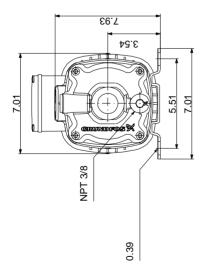


Date:

3/27/2020

# 97568416 CM 5-4 A-S-A-V-AQQV B-A-A-N 60 Hz





Note! All units are in [in] unless otherwise stated. Disclaimer: This simplified dimensional drawing does not show all details.



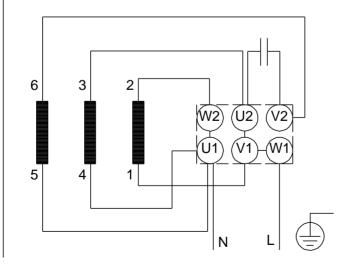
Date:

3/27/2020

# 97568416 CM 5-4 A-S-A-V-AQQV B-A-A-N 60 Hz

# HIGH VOLTAGE SUITABLE FOR FIELD CONNECTION 6 5 Ν

# LOW VOLTAGE



All units are [in] unless otherwise presented.