

### Submittal Data

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



# Product photo could vary from the actual product

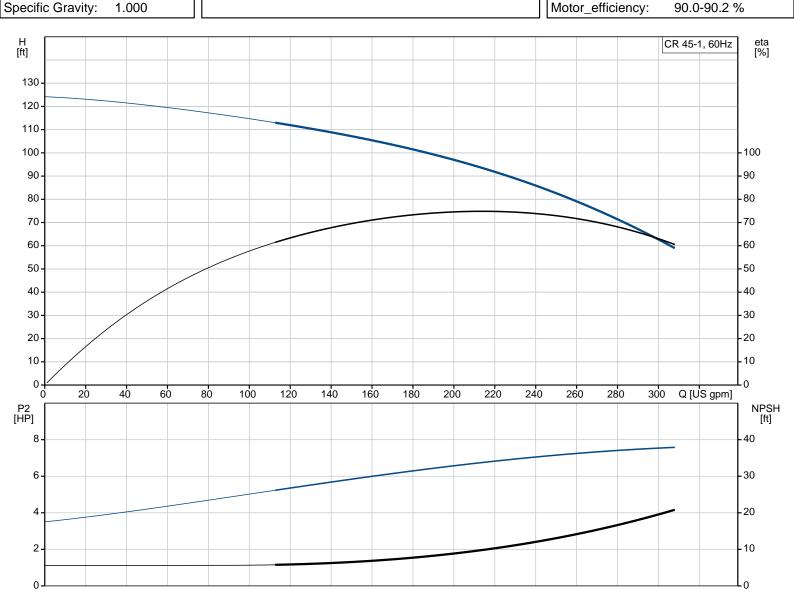
### CR 45-1 A-G-A-V-HQQV

Vertical, multistage centrifugal pump with suction and discharge ports on the same level. The pump head and base are in cast iron. All other wetted parts are in stainless steel (EN 1.4301) (AISI 304)

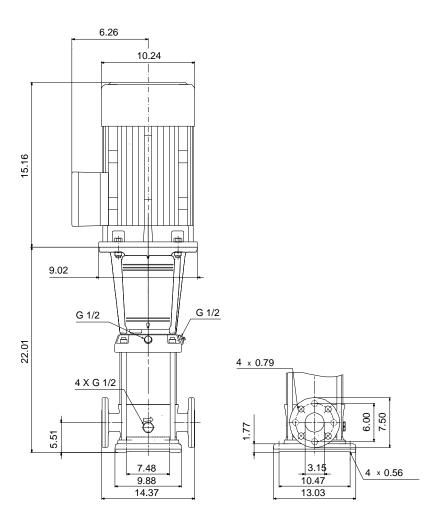
Conditions of Service		
Flow:		
Head:		
Efficiency:		
Liquid:	Water	
Temperature:	68 °F	
NPSH required:	ft	
Viscosity:		
0	4 000	

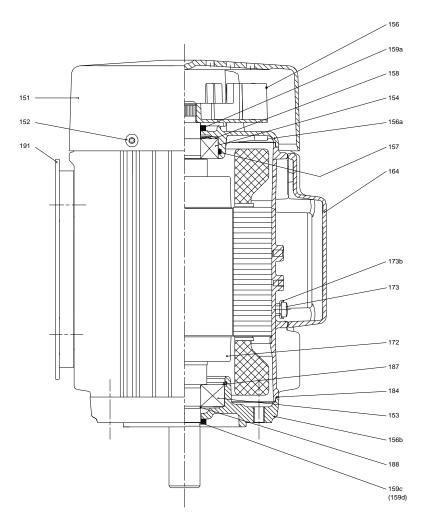
Pump Data		
Max pressure at stated temperature:	232 psi / 194 °F	
Liquid temperature range:	-4 194 °F	
Maximum ambient temperature:	140 °F	
Approvals:	CURUS	
Shaft seal:	HQQV	
Product number:	97744273	

Motor Data				
Rated power - P2:	10 HP			
Rated voltage:	208-230YY/460Y V			
Main frequency:	60 Hz			
Enclosure class:	55 Dust/Jetting			
Insulation class:	F			
Motor protection:	PTC			
Motor type:	132FA			
NA ( (C) )	00 0 00 0 0/			









#### Materials:

Base: Cast iron

> EN 1563 EN-GJS-500-7 ASTM A536 80-55-06

Impeller: Stainless steel

**AISI 304** EN 1.4301

Material code: Α Code for rubber:



**Date:** 3/19/2019

#### Count Description

1

CR 45-1 A-G-A-V-HQQV



Product No.: 97744273

Vertical, non-self-priming, multistage, in-line, centrifugal pump for installation in pipe systems and mounting on a foundation.

The pump has the following characteristics:

- Impellers and intermediate chambers are made of
- The shaft seal has assembly length

according to EN 12756.

- Power transmission is via cast iron split coupling.

The motor is a 3-phase AC motor.

Controls:

Frequency converter: NONE

Liquid:

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

Technical:

Rated pump speed: 3467 rpm
Rated flow: 238 US gpm
Rated head: 92.2 ft
Pump orientation: Vertical
Shaft seal arrangement: Single
Code for shaft seal: HQQV
Approvals on nameplate: CURUS

Curve tolerance: ISO9906:2012 3B

Materials:

Base: Cast iron

EN 1563 EN-GJS-500-7 ASTM A536 80-55-06

Impeller: Stainless steel

EN 1.4301 AISI 304 SIC

Bearing: SIC Support bearing: Graflon

Installation:

Maximum ambient temperature: 140 °F Maximum operating pressure: 232 psi

Max pressure at stated temperature: 232 psi / 194 °F

232 psi / -4 °F

Type of connection:

Size of suction port:

Size of outlet port:

Pressure rating for pipe connection:

Flange rating inlet:

Flange size for motor:

ANSI

3 inch

PN 16

Flange rating inlet:

150 lb

Flange size for motor:

213TC

**Electrical data:** 



**Date:** 3/19/2019

Count | Description

Motor standard: NEMA Motor type: 132FA

IE Efficiency class: NEMA Premium / IE3 60Hz

Rated power - P2: 10 HP Power (P2) required by pump: 10 HP Main frequency: 60 Hz

Rated voltage: 3 x 208-230YY/460Y V

Service factor: 1.15

Rated current: 26,5-24,6/12,4 A
Starting current: 680-900 %
Cos phi - power factor: 0.87

Cos phi - power factor:

Rated speed:

IE efficiency:

Motor efficiency at full load:

Motor efficiency at 3/4 load:

Motor efficiency at 1/2 load:

90.8 %

90.8 %

Number of poles: 2

Enclosure class (IEC 34-5): 55 Dust/Jetting

Insulation class (IEC 85): F

Others:

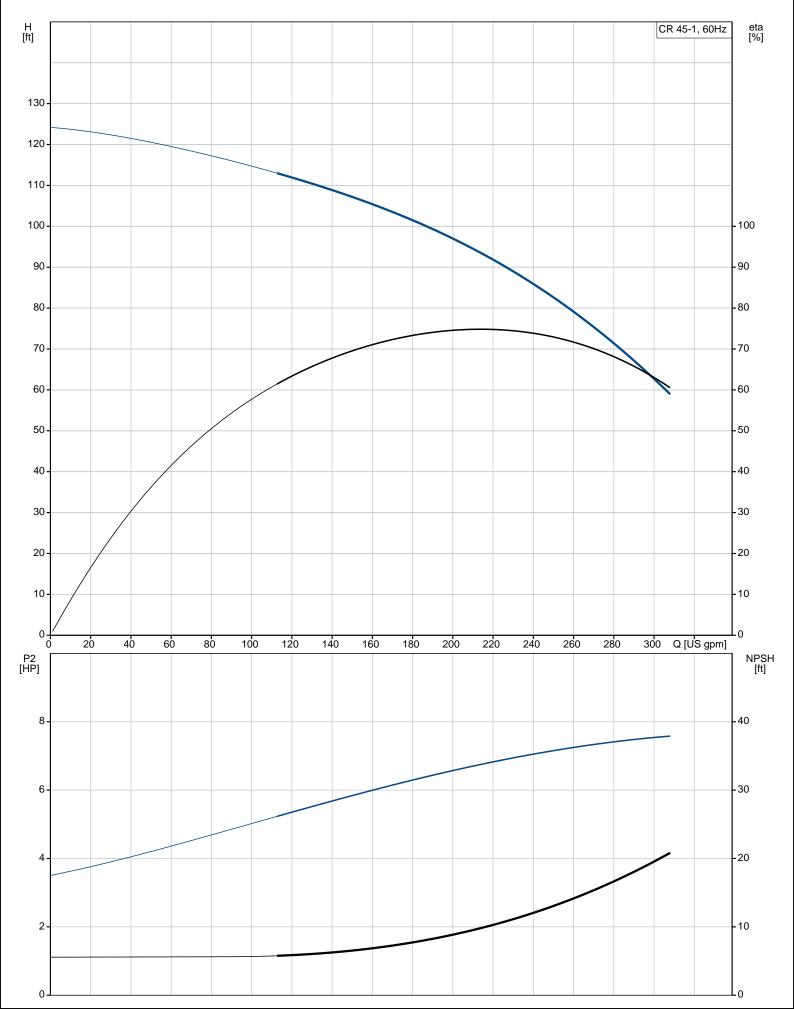
Net weight: 245 lb
Gross weight: 263 lb
Shipping volume: 10.9 ft³
Country of origin: US

Custom tariff no.: 8413.70.2040



**Date:** 3/19/2019

## 97744273 CR 45-1 A-G-A-V-HQQV 60 Hz





Date:	3/19/2019
Date.	3/19/2019

Description	Value
General information:	
Product name:	CR 45-1 A-G-A-V-HQQV
Product No.:	97744273
EAN:	5710623618340
Technical:	
Rated pump speed:	3467 rpm
Rated flow:	238 US gpm
Rated head:	92.2 ft
Head max:	126.6 ft
Stages:	1
Impellers:	1
Number of reduced-diameter impellers:  Low NPSH:	0 N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals on nameplate:	CURUS
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	В
Cooling:	TEFC
Materials:	
Base:	Cast iron
	EN 1563 EN-GJS-500-7
	ASTM A536 80-55-06
Impeller:	Stainless steel
	EN 1.4301
	AISI 304
Material code:	A
Code for rubber:	V
Bearing:	SIC
Support bearing:	Graflon
Installation:	•
Maximum ambient temperature:	140 °F
Maximum operating pressure:	232 psi
Max pressure at stated temperature:	232 psi / 194 °F
<del>-</del>	232 psi / -4 °F
Type of connection:	ANSI
Size of sudday port:	3 inch
Size of outlet port:	3 inch PN 16
Pressure rating for pipe connection: Flange rating inlet:	150 lb
Flange size for motor:	213TC
Connect code:	G
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-4 194 °F
Liquid temperature during operation:	68 °F
Density:	62.29 lb/ft <sup>3</sup>
Electrical data:	
Motor standard:	NEMA
Motor type:	132FA
IE Efficiency class:	NEMA Premium / IE3 60Hz
Rated power - P2:	10 HP
Power (P2) required by pump:	10 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1.15
Rated current:	26,5-24,6/12,4 A
Starting current:	680-900 %
Load current:	30,5-28,3/14,3 A
Cos phi - power factor:	0.87
Rated speed:	3480-3500 rpm
IE officionav:	IE2 00 20/

IE3 90,2%

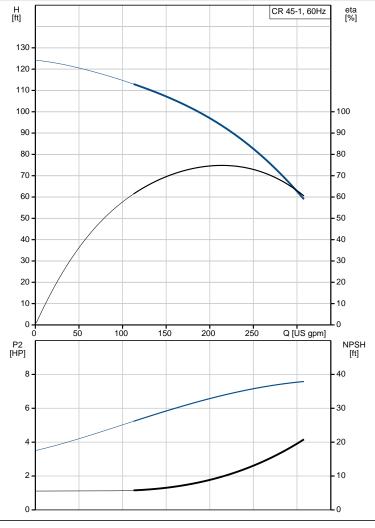
90.8 %

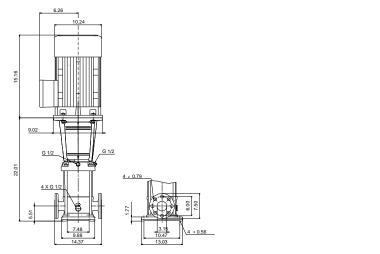
90.0-90.2 %

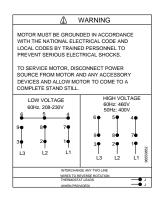
IE efficiency:

Motor efficiency at full load:

Motor efficiency at 3/4 load:









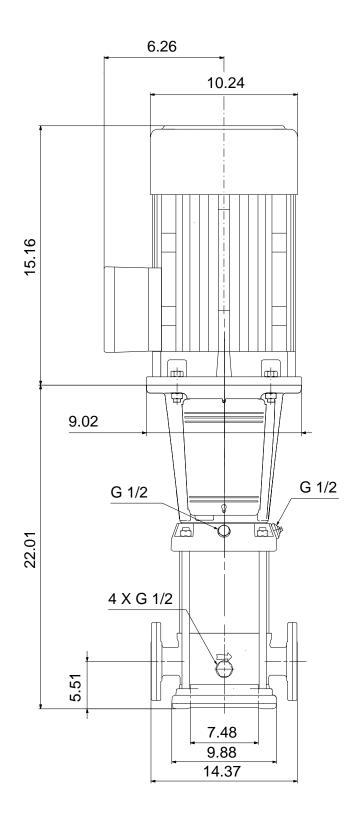
**Date:** 3/19/2019

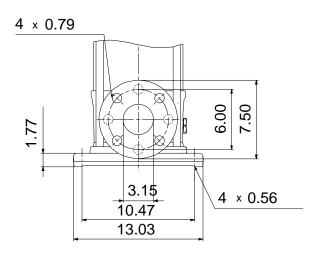
Description	Value
Motor efficiency at 1/2 load:	90.8 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protection:	PTC
Motor Number:	85903410
Controls:	
Frequency converter:	NONE
Others:	
Net weight:	245 lb
Gross weight:	263 lb
Shipping volume:	10.9 ft <sup>3</sup>
Sales region:	Namreg
Country of origin:	US
Custom tariff no.:	8413.70.2040



**Date:** 3/19/2019

# 97744273 CR 45-1 A-G-A-V-HQQV 60 Hz







**Date:** 3/19/2019

## 97744273 CR 45-1 A-G-A-V-HQQV 60 Hz



### **WARNING**

MOTOR MUST BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND LOCAL CODES BY TRAINED PERSONNEL TO PREVENT SERIOUS ELECTRICAL SHOCKS.

TO SERVICE MOTOR, DISCONNECT POWER SOURCE FROM MOTOR AND ANY ACCESSORY DEVICES AND ALLOW MOTOR TO COME TO A COMPLETE STAND STILL.

