

**Date:** 08/05/2019

## Qty. | Description

1 CR 45-12-2A-F-A-V-HQQV



Note! Product picture may differ from actual product

Product No.: 96122843

Vertical, multistage centrifugal pump with inlet and outlet ports on same the level (inline). The pump head and base are in cast iron – all other wetted parts are in stainless steel. A cartridge shaft seal ensures high reliability, safe handling, and easy access and service. Power transmission is via a rigid split coupling. Pipe connection is via DIN flanges.

The pump is fitted with a 3-phase, fan-cooled asynchronous motor.

**Controls:** 

Frequency converter: NONE

Liquid:

Pumped liquid: Water
Liquid temperature range: -20 .. 90 °C
Selected liquid temperature: 20 °C

Density at selected liquid temperature: 998.2 kg/m³

Technical:

Pump speed on which pump data are based: 2960 rpm

Rated flow: 45 m³/h
Rated head: 242.1 m
Pump orientation: Vertical
Shaft seal arrangement: Single
Code for shaft seal: HQQV
Approvals on nameplate: CE, EAC

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

Bearing: SIC Support bearing: Graflon

Installation:

Maximum ambient temperature: 55 °C Maximum operating pressure: 33 bar



**Date:** 08/05/2019

## Qty. | Description

Max pressure at stated temp: 33 bar / 90 °C

33 bar / -20 °C

Type of connection: DIN
Size of inlet connection: DN 80
Size of outlet connection: DN 80
Pressure rating for pipe connection: PN 40
Flange size for motor: FF400

**Electrical data:** 

Motor standard: IEC
Motor type: SIEMENS
IE Efficiency class: IE3
Rated power - P2: 45 kW
Power (P2) required by pump: 45 kW
Mains frequency: 50 Hz

Rated voltage: 3 x 380-420D/660-725Y V Rated current: 81,0-74,0/47,0-43,0 A

Starting current: 690-690 %
Cos phi - power factor: 0.89
Rated speed: 2960 rpm
Efficiency: IE3 94,0%
Motor efficiency at full load: 94.0-94.0 %
Motor efficiency at 3/4 load: 94.5-94.5 %
Motor efficiency at 1/2 load: 94.4-94.4 %

Number of poles: 2

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

Insulation class (IEC 85): F

Motor No: 81U15336

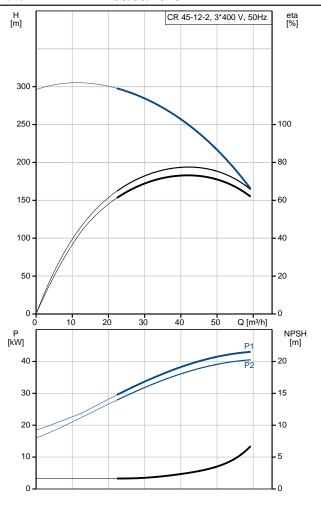
## Others:

Minimum efficiency index, MEI ≥: 0.70
Net weight: 460 kg
Gross weight: 562 kg
Shipping volume: 1.24 m³
Country of origin: GB
Custom tariff no.: 84137075



**Date:** 08/05/2019

Description	Value
General information:	Value
General information.	CR
Product name:	45-12-2A-F-A-V-HQQV
Product No:	96122843
EAN number:	5700396688879
Technical:	070000000070
Pump speed on which pump data are	
based:	2960 rpm
Rated flow:	45 m³/h
Rated head:	242.1 m
Head max:	295.8 m
Stages:	12
Impellers:	12
Number of reduced-diameter impellers:	2
Low NPSH:	N
Pump orientation:	Vertical
Shaft seal arrangement:	Single
Code for shaft seal:	HQQV
Approvals on nameplate:	CE, EAC
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	В
Materials:	
Base:	Cast iron
	EN 1563 EN-GJS-500-7
	AOTM A500 00 55 00
	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:	55 °C
Maximum operating pressure:	33 bar
Max pressure at stated temp:	33 bar / 90 °C
	33 bar / -20 °C
Type of connection:	DIN
Size of inlet connection:	DN 80
Size of outlet connection:	DN 80
Pressure rating for pipe connection:	PN 40
Flange size for motor:	FF400
Connect code:	F
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-20 90 °C
Selected liquid temperature:	20 °C
Density at selected liquid temperature:	998.2 kg/m³
Electrical data:	- 2 y/111
Motor standard:	IEC
Motor type:	SIEMENS
IE Efficiency class:	1E3
Rated power - P2:	45 kW
Dower (D2) required by my	
Power (P2) required by pump:	45 kW
Power (P2) required by pump: Mains frequency:	50 Hz 3 x 380-420D/660-725Y





**Date:** 08/05/2019

Description	Value
Rated current:	81,0-74,0/47,0-43,0 A
Starting current:	690-690 %
Cos phi - power factor:	0.89
Rated speed:	2960 rpm
Efficiency:	IE3 94,0%
Motor efficiency at full load:	94.0-94.0 %
Motor efficiency at 3/4 load:	94.5-94.5 %
Motor efficiency at 1/2 load:	94.4-94.4 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Motor protec:	PTC
Motor No:	81U15336
Controls:	
Frequency converter:	NONE
Others:	
Minimum efficiency index, MEI ≥:	0.70
Net weight:	460 kg
Gross weight:	562 kg
Shipping volume:	1.24 m³
Country of origin:	GB
Custom tariff no.:	84137075