

Due to the balancing, this seal type is suitable for high-pressure applications.

The cartridge construction also protects the pump shaft from possible wear from a dynamic O-ring between pump shaft and shaft seal.

Seal faces:



### Qty. | Description

1

- Rotating seal ring material: silicon carbide (SiC)
- Stationary seat material: carbon graphite, resin-impregnated
- This material pairing has a very good corrosion resistance and is especially suitable for water up to 90 °C.
- The seal life will be reduced significantly at temperatures above 90 °C.

The material pairing is not recommended for liquids containing particles as this will result in heavy wear on the SiC face.

Secondary seal material: EPDM (ethylene-propylene rubber)

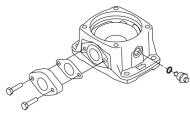
EPDM has excellent resistance to hot water. EPDM is not suitable for mineral oils.



The shaft seal is screwed into the pump head.

The chambers and impellers are made of stainless-steel sheet. The chambers are provided with a PTFE neck ring offering improved sealing and high efficiency. The impellers have smooth surfaces, and the shape of the blades ensure a high efficiency.

The base is made of cast iron. The oval flanges are bolted to the base. The outlet side of the base has a drain plug. The pump is secured to the foundation by four bolts through the base plate.



## Motor

The motor is a totally enclosed, fan-cooled motor with principal dimensions to IEC and DIN standards. The motor is flange-mounted with free-hole flange (FF).

Motor-mounting designation in accordance with IEC 60034-7: IM B 5 (Code I) / IM 3001 (Code II).

Electrical tolerances comply with IEC 60034.

The motor efficiency is classified as premium efficiency in accordance with EISA2007.

The motor has thermistors (PTC sensors) in the windings in accordance with DIN 44081/DIN 44082. The protection reacts to both slow- and quick-rising temperatures, e.g. constant overload and stalled conditions.

Thermal switches must be connected to an external control circuit in a way which ensures that the automatic reset cannot cause accidents. The motors must be connected to a motor-protective circuit breaker according to local regulations.

The motor can be connected to a variable speed drive for adjustment of pump performance to any duty point. Grundfos CUE offers a range of variable speed drives. Please find more information in Grundfos Product Center.

### **Technical data**

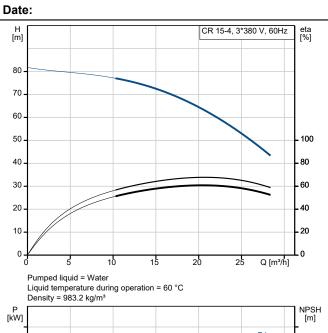
Liquid: Pumped liquid: Liquid temperature range: Selected liquid temperature: Density:	Water 0 120 °C 60 °C 983.2 kg/m³	
Technical: Pump speed on which pump data Rated flow: Rated head: Pump orientation: Shaft seal arrangement:	are based: 20.5 m³/h 64.5 m Vertical Single	3526 rpm

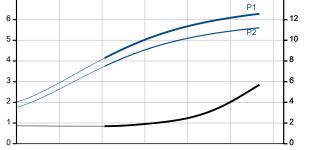


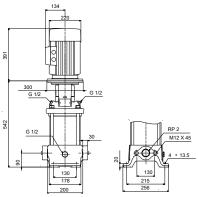
Qty.	Description	
1	Primary shaft seal: Code for shaft seal: Approvals: Approvals for drinking water: Curve tolerance:	HQBE HQBE CE,EAC,UKCA,SEPRO WRAS ISO9906:2012 3B
	Materials: Base:	Cast iron EN 1561 EN-GJL-200 ASTM A48-25B
	Impeller:	Stainless steel EN 1.4301 AISI 304
	Bearing:	SIC
	Installation: Maximum ambient temperature: Maximum operating pressure: Max pressure at stated temp:	60 °C 10 bar 10 bar / 120 °C 10 bar / 0 °C
	Type of connection: Size of inlet connection: Size of outlet connection: Pressure rating for connection: Flange size for motor:	Oval / Rp 2 inch 2 inch PN 10 FF265
	Electrical data: Motor standard: Motor type: Rated power - P2: Power (P2) required by pump: Mains frequency: Rated voltage: Rated voltage: Rated current: Starting current: Cos phi - power factor: Rated speed: IE Efficiency class: Motor efficiency at full load: Motor efficiency at 3/4 load: Motor efficiency at 1/2 load: Number of poles: Enclosure class (IEC 34-5): Insulation class (IEC 85): Motor No:	IEC 132SC 5.5 kW 5.5 kW 60 Hz 3 x 220-277D/380-480Y V 18,4-16,2/10,6-9,30 A 1020-1480 % 0.90-0.80 3510-3550 rpm NEMA Premium / IE3 60Hz 89.5 % 90.3-89.9 % 89.9-87.9 % 2 55 Dust/Jetting F 85U07417
	Controls: Frequency converter: Others: Terminal box position: Minimum efficiency index, MEI ≥:	
	Net weight: Gross weight: Shipping volume: Country of origin: Custom tariff no.:	88 kg 110 kg 0.234 m <sup>3</sup> HU 841381200000

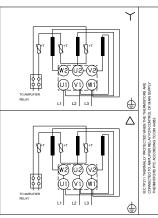


Description	Value	H [m]	
General information:			
Product name:	CR 15-4 A-A-A-E-HQBE	80 -	
Product No:	On request	70 -	
EAN number:	On request	60 -	
Technical:			
Pump speed on which pump data are based:	3526 rpm	50 -	
Rated flow:	20.5 m³/h	40 -	
Rated head:	64.5 m	30 -	
Maximum head:	81.8 m	-	
Stages:	4	20 -	
Impellers:	4	10 -	
Number of reduced-diameter impellers:	0	_	
Low NPSH:	Ν	- 0 <del>4</del> 0	/
Pump orientation:	Vertical		Pumpe
Shaft seal arrangement:	Single	l	Liquid t
Primary shaft seal:	HQBE	- I P[	Density
Code for shaft seal:	HQBE	[kW]	
Approvals:	CE,EAC,UKCA,SEPRO		
Approvals for drinking water:	WRAS	6-	
Curve tolerance:	ISO9906:2012 3B	5-	
Pump version:	A	-	
Model:	A	4 -	
Materials:		3-	
Base:	Cast iron	-	
Base.	EN 1561 EN-GJL-200	2-	$\sim$
	ASTM A48-25B	- 1-	
Impeller:	Stainless steel		
impeller.	EN 1.4301	- <b>1</b>	
	AISI 304		
Material code:			
	A		,
Code for rubber:	SIC		
Bearing:	SIC		391
Installation:	<b>22 2</b>		
Maximum ambient temperature:	60 °C		3
Maximum operating pressure:	10 bar		
Max pressure at stated temp:	10 bar / 120 °C		
	10 bar / 0 °C		542
Type of connection:	Oval / Rp		
Size of inlet connection:	2 inch		
Size of outlet connection:	2 inch		5
Pressure rating for connection:	PN 10		
Flange size for motor:	FF265		
Connect code:	А		
Liquid:			
Pumped liquid:	Water	-	_
Liquid temperature range:	0 120 °C	-	ſ
Selected liquid temperature:	60 °C	-	\$
Density:	983.2 kg/m³	-	
Electrical data:	-	-	k k
Motor standard:	IEC	-	TO AMPLIFIER RELAY
Motor type:	132SC	-	
Rated power - P2:	5.5 kW	-	_
Power (P2) required by pump:	5.5 kW	-	
Mains frequency:	60 Hz	-	8
	3 x 220-277D/380-480Y	-	
	0 A ZZU-ZI I D/300-400 I		t
Rated voltage:	V		ěě







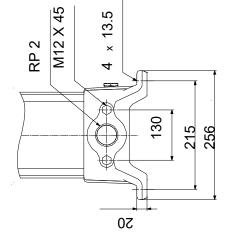


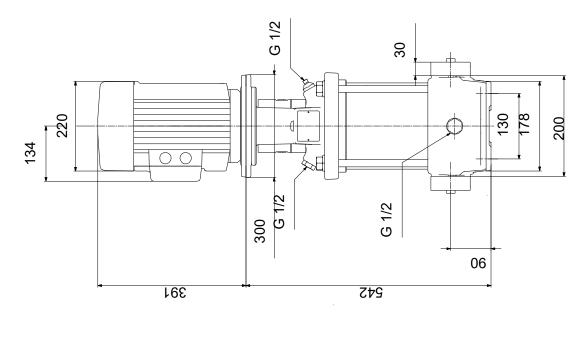


Description	Value
Starting current:	1020-1480 %
Cos phi - power factor:	0.90-0.80
Rated speed:	3510-3550 rpm
IE Efficiency class:	NEMA Premium / IE3 60Hz
Motor efficiency at full load:	89.5 %
Motor efficiency at 3/4 load:	90.3-89.9 %
Motor efficiency at 1/2 load:	89.9-87.9 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F
Built-in motor protection:	PTC
Motor No:	85U07417
Controls:	
Frequency converter:	None
Others:	
Terminal box position:	6
Minimum efficiency index, MEI ≥:	0.70
Net weight:	88 kg
Gross weight:	110 kg
Shipping volume:	0.234 m³
Sales region:	Saudi Arabia
Country of origin:	HU
Custom tariff no.:	841381200000



# On request CR 15-4 A-A-A-E-HQBE 60 Hz





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