

Count	Description
1	CRN 1S-4 A-P-A-V-HQQV  Product No.: 96081690 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, intermediate chambers and outer sleeve are made of - Pump head cover and base are made of - The shaft seal has assembly length according to EN 12756. - Power transmission is via cast iron split coupling flanges/couplings. 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: 3425 rpm Rated flow: 4.84 US gpm Rated head: 77.1 ft Pump orientation: Vertical Shaft seal arrangement: Single Code for shaft seal: HQQV Approvals on nameplate: CURUS Curve tolerance: ISO9906:2012 3B Materials: Base: Stainless steel EN 1.4408 AISI 316 Impeller: Stainless steel EN 1.4401 AISI 316 Bearing: SIC Installation: Maximum ambient temperature: 104 °F Maximum operating pressure: 363 psi Max pressure at stated temperature: 363 psi / 194 °F 363 psi / -4 °F Type of connection: PJE Size of inlet connection: DN 32 Size of suction port: 1 1/4 inch Size of outlet connection: DN 32 Size of outlet port: 1 1/4 inch Pressure rating for pipe connection: PN 50

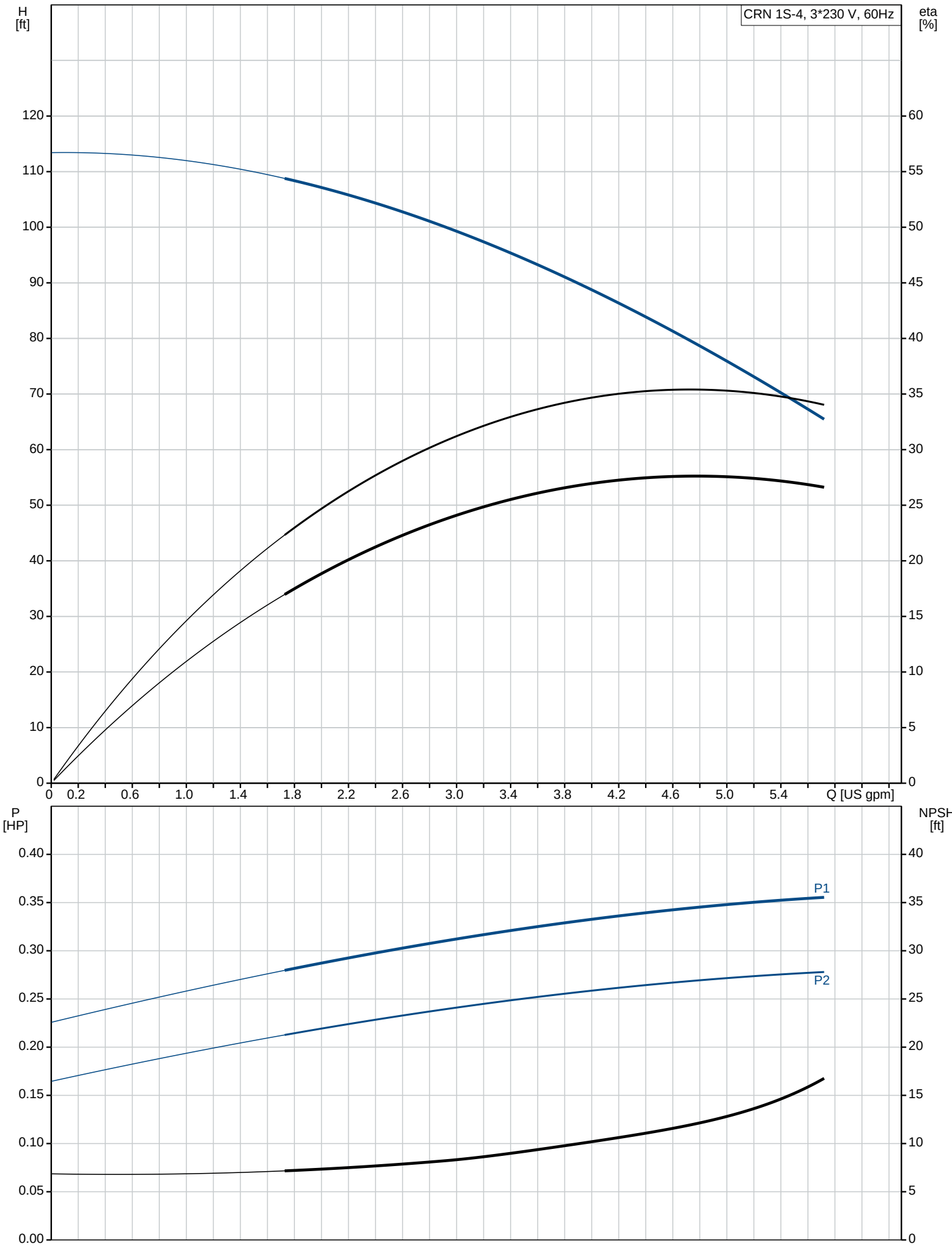


Company name:
Created by:
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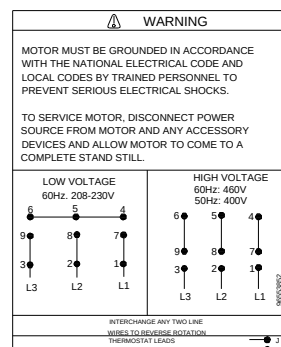
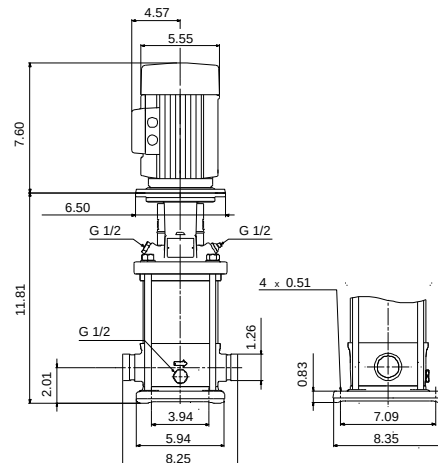
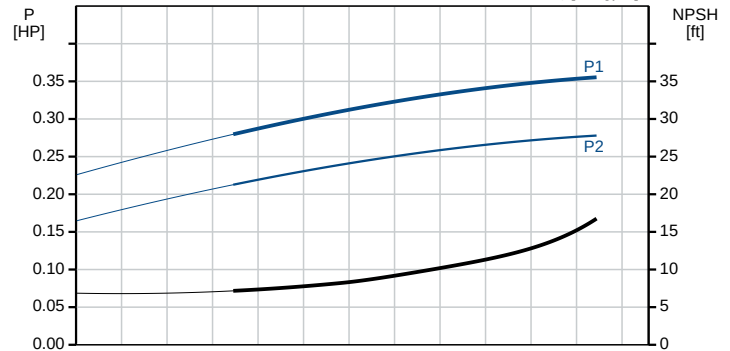
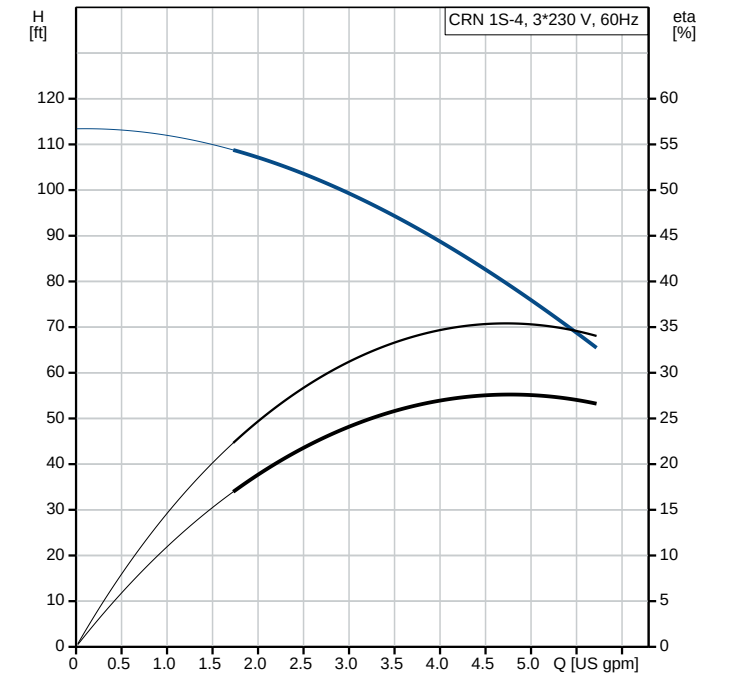
Date: 2/15/2019

Count	Description
	Flange size for motor: 56C
	Electrical data:
	Motor standard: NEMA
	Motor type: 71AA
	Rated power - P2: 0.33 HP
	Power (P2) required by pump: 0.33 HP
	Main frequency: 60 Hz
	Rated voltage: 3 x 208-230YY/460Y V
	Service factor: 1.35
	Rated current: 1,12-1,10/0,55 A
	Starting current: 630-700 %
	Cos phi - power factor: 0.81-0.75
	Rated speed: 3450-3480 rpm
	Motor efficiency at full load: 78.5 %
	Number of poles: 2
	Enclosure class (IEC 34-5): 55 Dust/Jetting
	Insulation class (IEC 85): F
	Others:
	Net weight: 42.6 lb
	Gross weight: 53.6 lb
	Shipping volume: 4.94 ft³
	Country of origin: US
	Custom tariff no.: 8413.70.2040

96081690 CRN 1S-4 A-P-A-V-HQQV 60 Hz



Description	Value
General information:	
Product name:	CRN 1S-4 A-P-A-V-HQQV
Product No.:	96081690
EAN:	5700395161342
Technical:	
Rated pump speed:	3425 rpm
Rated flow:	4.84 US gpm
Rated head:	77.1 ft
Head max:	112.5 ft
Stages:	4
Impellers:	4
Number of reduced-diameter impellers:	0
Low NPSH:	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:	A
Cooling:	TEFC
Materials:	
Base:	Stainless steel EN 1.4408 AISI 316
Impeller:	Stainless steel EN 1.4401 AISI 316
Material code:	A
Code for rubber:	V
Bearing:	SIC
Installation:	
Maximum ambient temperature:	104 °F
Maximum operating pressure:	363 psi
Max pressure at stated temperature:	363 psi / 194 °F 363 psi / -4 °F
Type of connection:	PJE
Size of inlet connection:	DN 32
Size of suction port:	1 1/4 inch
Size of outlet connection:	DN 32
Size of outlet port:	1 1/4 inch
Pressure rating for pipe connection:	PN 50
Flange size for motor:	56C
Connect code:	P
Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-4 .. 194 °F
Liquid temperature during operation:	68 °F
Density:	62.29 lb/ft³
Electrical data:	
Motor standard:	NEMA
Motor type:	71AA
Rated power - P2:	0.33 HP
Power (P2) required by pump:	0.33 HP
Main frequency:	60 Hz
Rated voltage:	3 x 208-230YY/460Y V
Service factor:	1.35
Rated current:	1,12-1,10/0,55 A
Starting current:	630-700 %
Load current:	1,5-1,45/0,75 A
Cos phi - power factor:	0.81-0.75
Rated speed:	3450-3480 rpm
Motor efficiency at full load:	78.5 %
Number of poles:	2
Enclosure class (IEC 34-5):	55 Dust/Jetting
Insulation class (IEC 85):	F





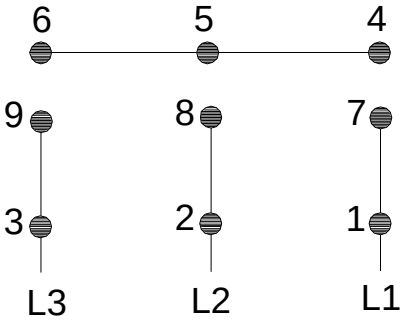
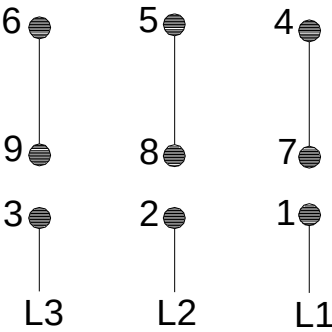
Company name:
Created by:
Phone:

Date: 2/15/2019

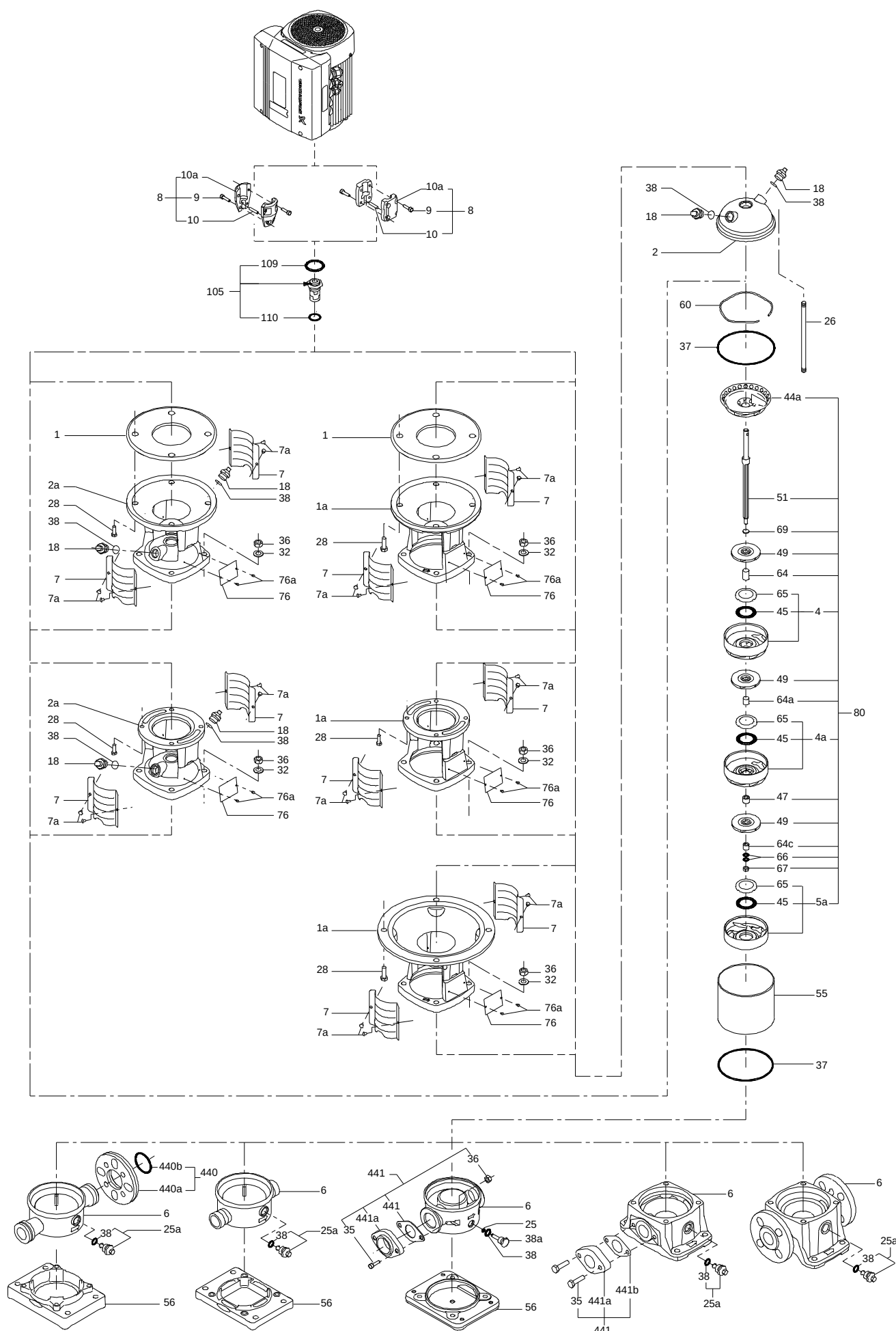
Description	Value
Motor protection:	NONE
Motor Number:	85900700
Controls:	
Frequency converter:	NONE
Others:	
Net weight:	42.6 lb
Gross weight:	53.6 lb
Shipping volume:	4.94 ft³
Country of origin:	US
Custom tariff no.:	8413.70.2040

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

96081690 CRN 1S-4 A-P-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.	
LOW VOLTAGE 60Hz. 208-230V 	HIGH VOLTAGE 60Hz: 460V 50Hz: 400V  96553852
INTERCHANGE ANY TWO LINE WIRES TO REVERSE ROTATION	
THERMOSTAT LEADS (WHEN PROVIDED) J J	

(TM069451 for SMCR standard)



Service parts CRN 1S-4, Prod number 96081690
Valid from 10.1.2005 (0503)

Position	Description	Annotation	Classification data	Part No.	Count	Unit
- 80	Kit, chamber stack		Bearing type: SILICON CARBIDE	96479080	1	pcs
- 4a	Chamber w. bearing cpl.				1	
4a	Intermediate chamber					
45	Neck ring					
65	Neck ring retainer					
- 4	Chamber cpl.				2	
4a	Intermediate chamber					
45	Neck ring					
65	Neck ring retainer					
- 5a	Chamber cpl.				1	
4a	Intermediate chamber					
45	Neck ring					
65	Neck ring retainer					
- 44a	Guide vane				1	
	Plate					
50	Top plate					
47	Bearing ring, rotating				1	
- 49	Impeller cpl.				4	
49	Impeller					
51	Shaft, spline, cpl.				1	
64d	Spacing pipe		Inner diameter: 12,85		1	
			Outer diameter: 15,85			
			Length: 4,50			
64c	Clamp, splined		Inner diameter: 8,5		1	
			Outer diameter: 15			
64a	Spacing pipe				2	
66	Wedge lock washer				1	
67	Lock nut		Thread: M8		1	
-	Kit, coupling			00415314	1	pcs
9	Hex socket head cap screw		Designation: DIN 912		4	
			Length: 20			
			Thread: M6			
10a	Coupling half				2	
10	Shaft pin		Diameter: 5		1	
			Length: 26			
-	Kit, coupling guard			96505130	1	pcs
7.a	Combi Slot Torx screw				4	
7	Coupling guard				2	
-	Kit, O-rings		Rubber type: FKM	96455091	1	pcs
37	O-ring		Diameter: 137,5		2	
			Material type: FKM			
			Thickness: 3,3			
38	O-ring		Diameter: 16,3		1	
			Material type: FKM			
			Thickness: 2,4			
38	O-ring		Diameter: 16,3		2	
			Material type: FKM			
			Thickness: 2,4			
109	O-ring		Diameter: 22,00		1	
			Material type: FKM			
			Thickness: 2,75			
-	Kit, plug			96511103	1	pcs
- 18	Air vent screw				1	
	Spindle					
	Plug					
23b	Spindle				1	
25	Plug				1	
- 25	Drain plug				1	
25a	Pipe plug					
25	Drain plug					
38	O-ring				1	

Position	Description	Annotation	Classification data	Part No.	Count	Unit
38	O-ring		Diameter: 16,3		3	
			Material type: FKM			
			Thickness: 2,4			
38	O-ring				1	
38	O-ring		Diameter: 16,3		3	
			Material type: EPDM			
			Thickness: 2,4			
-	Kit, shaft seal HQQV			96455087	1	pcs
	Grinding device				1	
- 105	Shaft seal		Material type: HQQV		1	
	Compression spring					
	Plug					
	Plug					
	Pipe					
	Seal ring, rotating					
	Spacer ring					
	Seal driver, lower					
	Seal ring, stationary					
	Seal driver, upper					
	O-ring					
	O-ring					
9	Socket set screw					
109	O-ring					
110	O-ring					
113	Driver					
-	Kit, wear parts		Material type: SILICON CARBIDE	96455095	1	pcs
- 4a	Chamber w. bearing cpl.				1	
4a	Intermediate chamber					
45	Neck ring					
65	Neck ring retainer					
45	Neck ring				8	
47	Bearing ring, rotating				1	
64d	Spacing pipe		Inner diameter: 12,85		1	
			Outer diameter: 15,85			
			Length: 4,50			
64c	Clamp, splined		Inner diameter: 8,5		1	
			Outer diameter: 15			
65	Neck ring retainer				8	
66	Wedge lock washer				1	
67	Lock nut		Thread: M8		1	
441b	Gasket				2	
-	Motor			85901795	1	pcs
-	Kit, Ball bearing			96279741	1	
111	Ball bearing		Designation: 6304.2Z.C3.SYN			
111	Ball bearing					
157	O-ring		Diameter: 32			
			Material type: NBR			
			Thickness: 2			
158	Waved washer					
-	Kit, fan			96279721	1	
156	Fan					
159a	Seal ring					
-	Kit, fan cover			96279720	1	
151	Fan cover					
152	Pan head thread forming screw					
-	Kit, flange			96279836	1	
156b	Flange					
159.c	Seal ring					
184	Gasket		Inner diameter: 114,80			
			Outer diameter: 121,20			
			Thickness: 0,25			
185	Pan head screw					
186	Drain plug					
-	Kit, shaft seal			96279722	1	
159c	Seal ring					
159a	Seal ring					

Position	Description	Annotation	Classification data	Part No.	Count	Unit
-	Kit, terminal box			96279837	1	
152	Screw					
164a	Terminal box w/gasket					
164	Terminal box cover w/gasket					
166	Pan head thread forming screw					
173a	Washer		Designation: SQUARE			
			Inner diameter: 5,5			
			Outer diameter: 10X10			
			Thickness: 1,5			
173	Pan head screw		Designation: DIN 7985			
178	Pan head screw		Designation: DIN 7985			
	Motor				1	pcs
1a	Motor stool			98947314	1	pcs
2	Pump cover			96588244	1	pcs
+ 4a	Bulk, Chamber w. bearing cpl. (5 pcs)			97690603	1	pcs
+ 4a	Bulk, Chamber w. bearing cpl. (5 pcs)			96547661	1	pcs
+ 4a	Chamber w. bearing cpl.			98371226	1	pcs
- 4	Bulk, Chamber cpl. (5 pcs)			97690021	2	pcs
45	Bulk, Neck ring (24 pcs)			96536194	1	
65	Bulk, Neck ring retainer (8 pcs)			99490745	1	
65	Bulk, Neck ring retainer (24 pcs)			99490747	1	
+ 4	Bulk, Chamber cpl. (10 pcs)			96547663	2	pcs
+ 4	Chamber cpl.			98371224	2	pcs
+ 5a	Chamber cpl.			98371222	1	pcs
6	Base			96588139	1	pcs
7a	Bulk, Combi Slot Torx screw (1000 pcs)			96886324	4	pcs
7	Bulk, Coupling guard (10 pcs)			96603690	2	pcs
+ 18	Bulk, Air vent screw (5 pcs)			96547461	1	pcs
+ 18	Air vent screw			95061351	1	pcs
26	Staybolt		Length: 169	98985617	4	pcs
			Thread: M12			
38	Bulk, O-ring (10 pcs)		Diameter: 16,3	99198813	1	pcs
			Material type: FKM			
			Thickness: 2,4			
37	Bulk, O-ring (24 pcs)		Diameter: 137,5	96547657	2	pcs
			Material type: FKM			
			Thickness: 3,3			
38	Bulk, O-ring (50 pcs)		Diameter: 16,3	99412883	1	pcs
			Material type: FKM			
			Thickness: 2,4			
+ 44a	Guide vane			98488445	1	pcs
47	Bulk, Bearing ring, rotating (10 pcs)			97905743	1	pcs
47	Bearing ring, rotating			96547649	1	pcs
+ 49	Bulk, Impeller cpl. (10 pcs)			98394265	4	pcs
+ 49	Impeller cpl.			98394411	4	pcs
51	Shaft, spline, cpl.			96588199	1	pcs
55	Outer sleeve			98811280	1	pcs
56	Base plate			96588142	1	pcs
60	Formed wire spring			96547664	1	pcs
64c	Bulk, Clamp, splined (5 pcs)		Inner diameter: 8,5	98496968	1	pcs
			Outer diameter: 15			
64a	Bulk, Spacing pipe (24 pcs)			96536198	2	pcs
66	Bulk, Wedge lock washer (10 pcs)			96536157	1	pcs
67	Bulk, Lock nut (10 pcs)		Thread: M8	98277008	1	pcs
+ 105	Bulk, Shaft seal (15 pcs)		Material type: HQQV	96983416	1	pcs