

Submittal Data

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



CM10-4

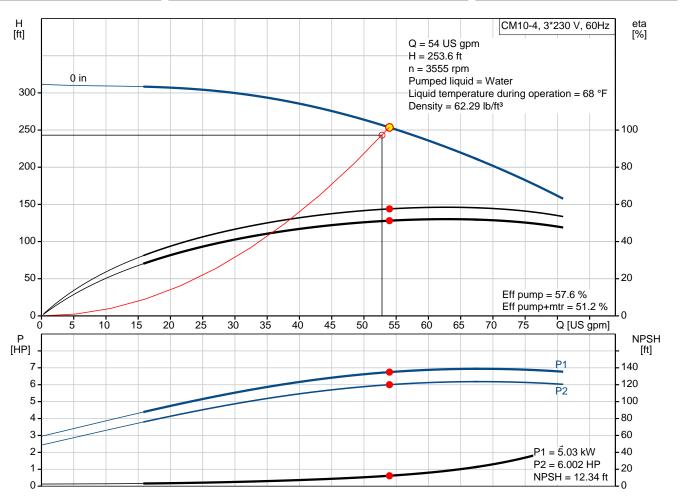
CM are reliable, quiet and compact horizontal end-suction pumps. The modular pump design makes it easy to make customised solutions. The CM pumps are available in cast iron and stainless steel

Product photo could vary from the actual product

Conditions of Service			
Flow:	54 US gpm		
Head:	253.6 ft		
Efficiency:	51.2 %		
Liquid:	Water		
Temperature:	68 °F		
NPSH required:	12.34 ft		
Viscosity:			
Specific Gravity:	1.000		

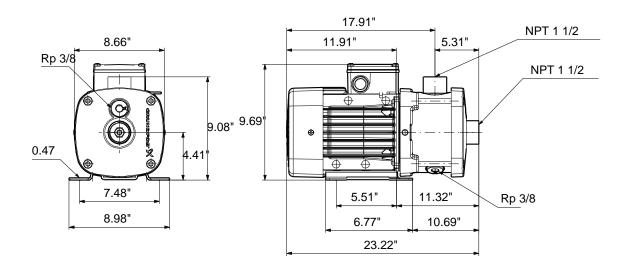
Pump Data			
Maximum operating pressure:	232 psi		
Liquid temperature range:	-4 194 °F		
Maximum ambient temperature:	131 °F		
Approvals:	CE,CULUS,WRAS,ACS,TR,EAC		
Shaft seal:	AQQV		
Flange standard:	INTERNAL NPT THREAD		
Product number:	98125948		

Motor Data					
Rated power - P2:	8 HP				
Rated voltage:	208-230YY/440-480Y V				
Main frequency:	60 Hz				
Enclosure class:	IP55				
Insulation class:	F				
Motor protection:	NO				
Motor type:	132BA				
Motor_efficiency:	88.5 %				





Submittal Data



Materials:

Pump housing: Stainless steel

DIN W.-Nr. 1.4301

AISI 304

Impeller: Stainless steel

DIN W.-Nr. 1.4301

AISI 304

Material code: I

Rubber: FKM Code for rubber: V



Date: 2/20/2018

Tender Text



Product No.: 98125948 CM10-4 A-S-I-V-AQQV

CM is a compact horizontal multistage centrifugal pump, close-coupled with a:

3-phase, 208-230YY/440-480Y V, 60 Hz Hz. Foot mounted motor.

The pump is with axial suction port and radial discharge port including a special designed mechanical shaft seal in the solution AQQV.

Shaft, impellers, chambers and filling plugs are made of stainless steel.

Suction and discharge are made of Stainless steel.

The CM can also operate as a CME by connecting the motor to a CUE. Please find more information in the CUE part of Win/WebCAPS.

Liquid:

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

Technical:

Speed for pump data: 3480 rpm
Actual calculated flow: 54 US gpm
Resulting head of the pump: 253.6 ft
Primary shaft seal: AQQV

Approvals on nameplate: CE,CULUS,WRAS,ACS,TR,EAC

Curve tolerance: ISO9906:2012 3B

Materials:

Pump housing: Stainless steel

DIN W.-Nr. 1.4301

AISI 304

Impeller: Stainless steel

DIN W.-Nr. 1.4301

AISI 304

Rubber: FKM

Installation:

Maximum ambient temperature: 131 °F Maximum operating pressure: 232 psi

Max pressure at stated temperature: 232 psi / 194 °F Flange standard: INTERNAL NPT THREAD

Pump inlet: NPT 1 1/2
Pump outlet: NPT 1 1/2

Electrical data:

Motor type: 132BA

IE Efficiency class: NEMA Energy / IE2 60Hz / NRC

Rated power - P2: 8 HP



Date: 2/20/2018

Main frequency: 60 Hz

Rated voltage: 3 x 208-230YY/440-480Y V

Service factor:

Rated current: 21-20,4/10,5-10,2 A Starting current: 900-1150 % Rated speed: 3520-3540 rpm

Motor efficiency at full load: 88.5 % Enclosure class (IEC 34-5): IP55 Insulation class (IEC 85): F

Others:

Minimum efficiency index, MEI : 0,52 Net weight: 106 lb Gross weight: 111 lb



Date: 2/20/2018

Position | Count | Description

1 CM10-4 A-S-I-V-AQQV



Product No.: 98125948

CM is a compact horizontal multistage centrifugal pump, close-coupled with a:

3-phase, 208-230YY/440-480Y V, 60 Hz Hz. Foot mounted motor.

The pump is with axial suction port and radial discharge port including a special designed mechanical shaft seal in the solution AQQV.

Shaft, impellers, chambers and filling plugs are made of stainless steel.

Suction and discharge are made of Stainless steel.

The CM can also operate as a CME by connecting the motor to a CUE. Please find more information in the CUE part of Win/WebCAPS.

Liquid:

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

Technical:

Speed for pump data: 3480 rpm
Actual calculated flow: 54 US gpm
Resulting head of the pump: 253.6 ft
Primary shaft seal: AQQV

Approvals on nameplate: CE,CULUS,WRAS,ACS,TR,EAC

Curve tolerance: ISO9906:2012 3B

Materials:

Pump housing: Stainless steel

DIN W.-Nr. 1.4301

AISI 304

Impeller: Stainless steel

DIN W.-Nr. 1.4301

AISI 304

Rubber: FKM

Installation:

Maximum ambient temperature: 131 °F Maximum operating pressure: 232 psi

Max pressure at stated temperature: 232 psi / 194 °F Flange standard: INTERNAL NPT THREAD

Pump inlet: NPT 1 1/2
Pump outlet: NPT 1 1/2

Electrical data:

Motor type: 132BA

IE Efficiency class: NEMA Energy / IE2 60Hz / NRC

Rated power - P2: 8 HP Main frequency: 60 Hz



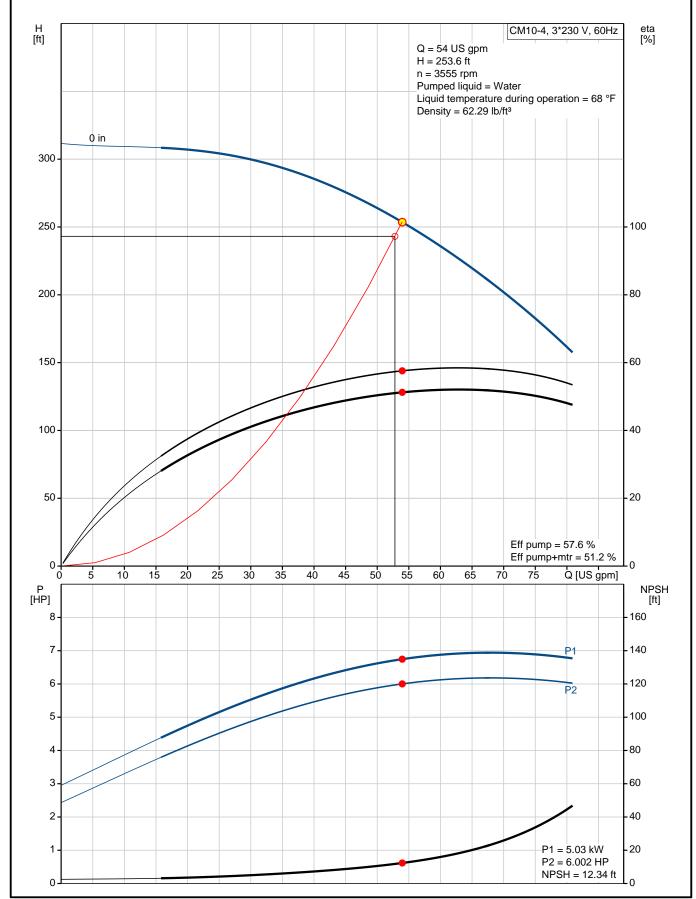
Date: 2/20/2018

			Date.	2/20/2010
Position	Count	Description		
		Rated voltage:	3 x 208-230YY/440-480Y V	
		Service factor:	1	
		Rated current:	21-20,4/10,5-10,2 A	
		Starting current:	900-1150 %	
		Rated speed:	3520-3540 rpm	
		Motor efficiency at full load: Enclosure class (IEC 34-5):	88.5 % IP55	
		Insulation class (IEC 85):	F	
		modiation diass (IEO do).	•	
		Others:		
		Minimum efficiency index, MEI	: 0,52	
		Net weight:	106 lb	
		Gross weight:	111 lb	
	1	1		



Date: 2/20/2018

98125948 CM10-4 60 Hz



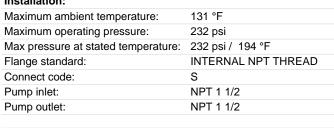


Date: 2/20/2018

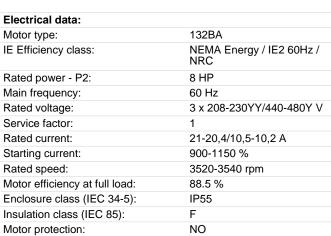
Description	Value
General information:	
Product name:	CM10-4 A-S-I-V-AQQV
Product No.:	98125948
EAN:	5710629474957
Technical:	
Speed for pump data:	3480 rpm
Actual calculated flow:	54 US gpm
Resulting head of the pump:	253.6 ft
Impellers:	4
Primary shaft seal:	AQQV
Approvals on nameplate:	CE,CULUS,WRAS,ACS,TR, EAC
Curve tolerance:	ISO9906:2012 3B
Pump version:	A
Model:	Α
Materials:	
Pump housing:	Stainless steel
	DIN WNr. 1.4301
	AISI 304
Impeller:	Stainless steel
	DIN WNr. 1.4301
	AISI 304
Material code:	I
Rubber:	FKM
Code for rubber:	V
Installation:	
Maximum ambient temperature:	131 °F
Maximum operating pressure:	232 psi
May pressure at stated temperature:	232 nei / 10/1 °F

H [ft]	CM10-4, 3*230 V, 60Hz	eta [%]
[11]	Q = 54 US gpm	[70]
	H = 253.6 ft n = 3555 rpm	
	Pumped liquid = Water	
	0 in Liquid temperature during operation = 68 °F	
300 -	Density = 62.29 lb/ft ³	
250 -		- 100
200	P	
200 -		- 80
150 -		- 60
150 -		- 60
100 -		- 40
50 -		- 20
	Eff pump = 57.6 %	
0 -	Eff pump+mtr = 51.2 %	L_o
C	10 20 30 40 50 60 Q [US gpm]	
P [HP] _		NPSH [ft]
F		
7 -	P1	- 140
6 -	P2	- 120
5 -	"	- 100
4 -		- 80
3 -		- 60
2 -	P1 = 5.03 kW	- 40
1 -	P2 = 6.002 HP	- 20
0 -	NPSH = 12.34 ft	L_{o}

5.51" 11.32" 6.77" 10.69" 23.22"



Liquid:	
Pumped liquid:	Water
Liquid temperature range:	-4 194 °F
Liquid temperature during operation:	68 °F
Density:	62.29 lb/ft ³





NPT 1 1/2

NPT 1 1/2



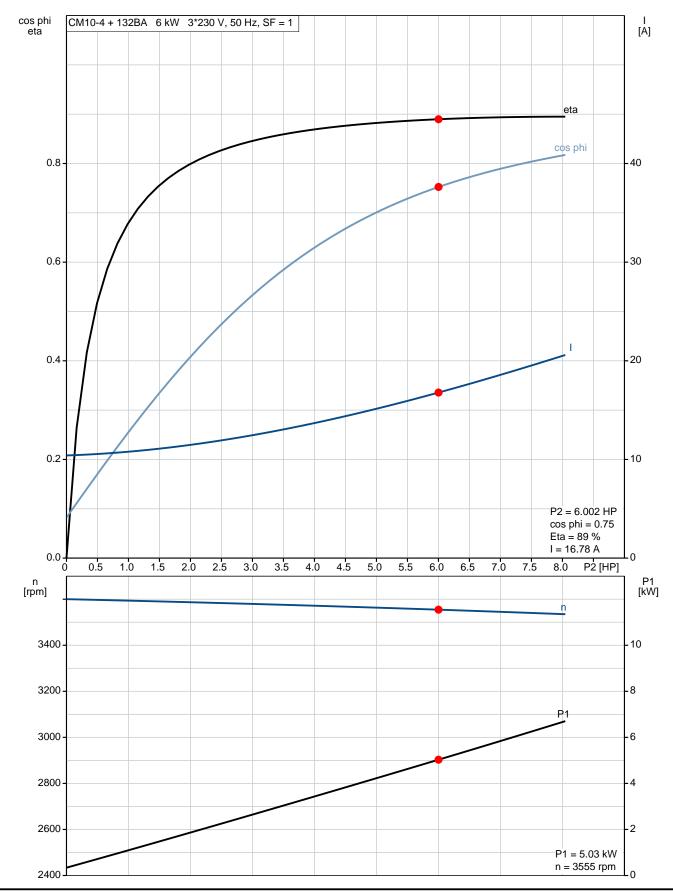
Date: 2/20/2018

Description	Value
Others:	
Minimum efficiency index, MEI:	0,52
Net weight:	106 lb
Gross weight:	111 lb



Date: 2/20/2018

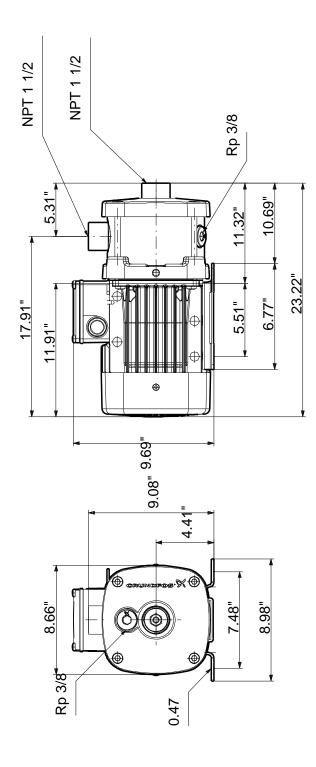
98125948 CM10-4 60 Hz





Date: 2/20/2018

98125948 CM10-4 60 Hz



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



Date: 2/20/2018

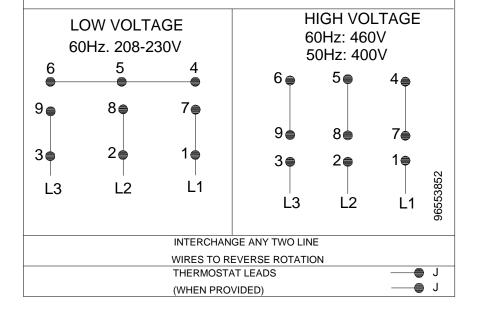
98125948 CM10-4 60 Hz



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.



All units are [mm] unless otherwise presented.



Date: 2/20/2018

Order Data:

Product name: CM10-4 A-S-I-V-AQQV

Amount: 1

Product No.: 98125948

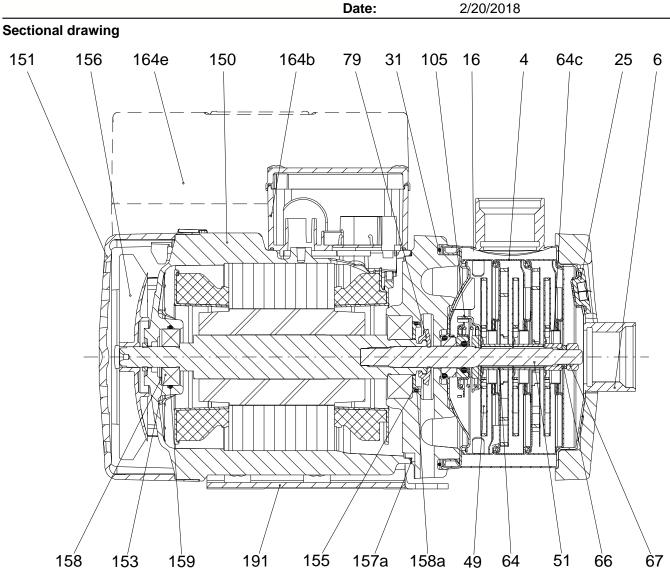
Total: Price on request



Date: 2/20/2018 Exploded view (MG(E) 71/80, MG(E) 90/100/112/132) MG(E)71/80 MG(E) 90/100/112/132 156b -151a 164 158a



Date:



165x100



Date: 2/20/2018

Parts list CM10-4, Prod number 98125948 Valid from 2.7.2009 (0927)

	Position	Description	Annotation	Classification data	Part No.	Cour	t Unit
-		Drain plug cpl.				2	pcs
	11	O-ring		Diameter: 18,5		1	
		•		Material type: FKM			
				Thickness: 2			
	25	Plug				1	
		ML132BA				1	pcs
-	4	Chamber cpl.				3	pcs
	45	Seal ring				1	
	65	Neck ring retainer				1	
	4.d	Chamber				1	pcs
-	4f	Chamber				1	pcs
		Seal ring				1	
		Inlet part				1	
	45	Seal ring				1	
	65	Neck ring retainer				1	
	6.a	Flange				1	pcs
	16	Collar sleeve cpl.				1	pcs
	26	Hex socket head cap screw		Length: 170		4	pcs
				Thread: M8			
	31	O-ring		Diameter: 153		1	pcs
				Material type: FKM			
				Thickness: 4,7			
-	32	Cover plate				1	pcs
		Cover plate				1	
		Plate				1	
	36	Lock nut		Thread: M8		1	pcs
	49	Impeller cpl.				4	pcs
	51	Pump shaft		Diameter: D16		1	pcs
	64	Spacing pipe				3	pcs
	64.a	Spacing pipe				1	pcs
	64.c	Clamp				1	pcs
	66	Wedge lock washer				1	pcs
	76	Nameplate				2	pcs
+	105	Shaft seal				1	pcs
	111.a	Stop ring				1	pcs
	151	Fan cover				1	pcs
	151.a	Installation indicator				1	pcs
	152	Pan head thread forming screw				4	pcs
	156	Fan				1	pcs
	191	Foot				1	pcs
	192	Thread forming screw				4	pcs