



TECHNICAL DATA

Flanging: 14".
Protection class: IP58 (IP68 on request).
Cooling flow speed: 0,5 m/s.
Power supply tolerance: + 6 % / -10 %.
Max. starts: PVC: 3/h - PE2+PA: 5/H.
Max operating depth: 300 m.
Max operating temperature: 60 bar.
Horizontal operation: 300 HP - 340 HP.
Direction of rotation: to specified in the order.

GENERAL DATA

Rewindable 14" submersible asynchronous two or four-pole electric motor available in standard version with casing in AISI 316 stainless steel and supports in cast iron. The thrust block and bushes are cooled and lubricated with a mixture of water and glycol. The rotor is mounted on a Mitchell self-centring thrust block designed to withstand significant axial loads. The motor is also available in a version entirely in AISI 316 stainless steel.

There is also a version suitable for use with variable frequency drive (30 Hz - 50).

The motor is equipped with single-core cables of 8 m connected directly to the winding, and is available in DOL or STAR-DELTA configuration.

The cables are ACS, WRAS and KTW certified. The electrical protection must be provided by the user.

PT100 and PTC temperature probes are available on request.

CONSTRUCTION FEATURES



The rewindable stator is protected by an AISI 316 stainless steel jacket.

In the standard version the rotor is wound with PVC coated wire. On request, we can supply a version with a PE2+PA winding that makes the motor compatible with special applications and with the use of a variable frequency drive.



Mitchell type thrust bearings with pads in rubber coated steel and steel clearance ring.

From 300 HP to 550 HP:

70000 N (one-way)

35000 N (two-way)

Counter-thrust load: 15000 N

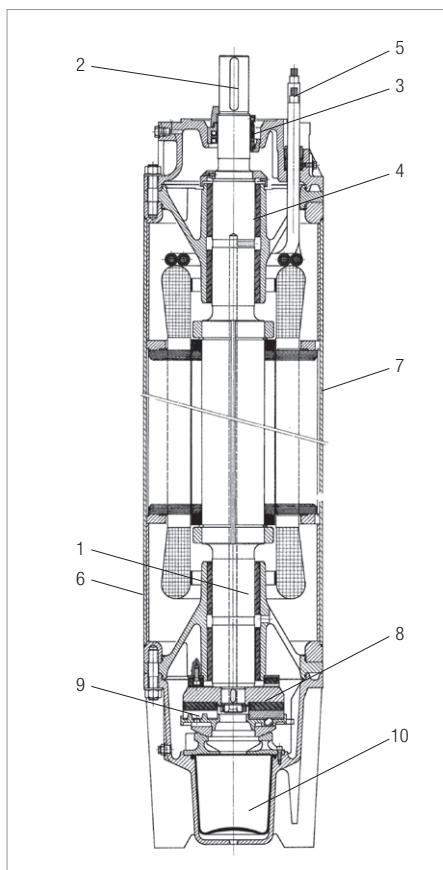


Rotor shaft in stainless steel, shaft extension with key connection.

The rotor is in copper for all sizes.

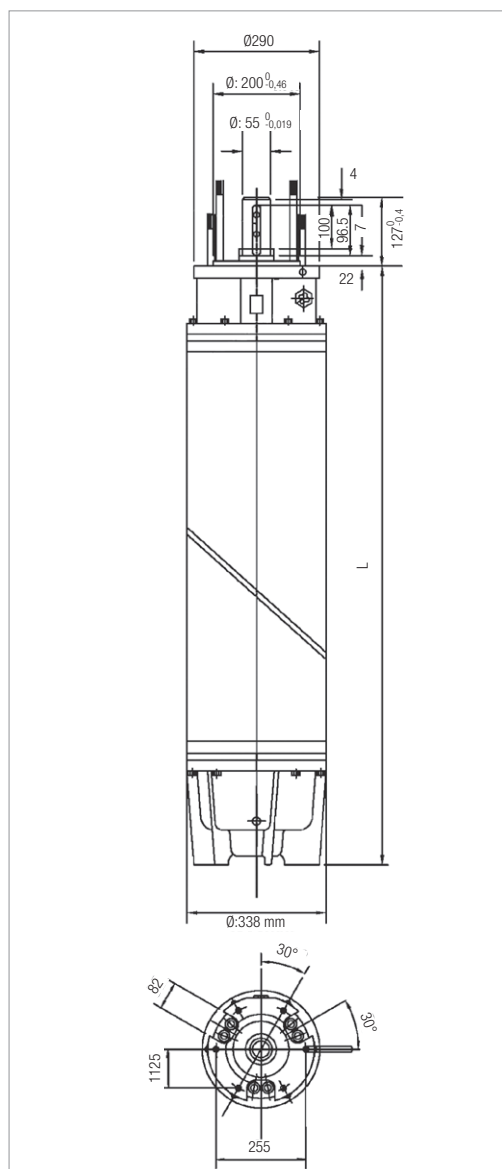
In the standard version the motor is supplied with a ceramic/carbon mechanical seal. A silicon carbide (SiC/SiC) mechanical seal is available on request.

The motor can also be fitted with an additional lip seal (IP68).



MATERIALS

N.	PARTS	STD VERSION	VERSION 316 SS
1	SHAFT	STAINLESS STEEL	STAINLESS STEEL
2	SHAFT TERMINAL	AISI 904 STAINLESS STEEL	AISI 904 STAINLESS STEEL
3	MECHANICAL SEAL	SIC/SIC	SIC/SIC
4	BUSHES	STEEL/NBR	STEEL/NBR
5	CABLE	EPDM	EPDM
6	STRUCTURAL PARTS	CAST IRON	AISI 316 STAINLESS STEEL
7	JACKET	AISI 316 STAINLESS STEEL	AISI 316 STAINLESS STEEL
8	CLEARANCE RING	STEEL	STEEL
9	THRUST	STEEL/NBR	STEEL/NBR
10	DIAPHRAGM	EPDM	EPDM
11	SCREWS	AISI 304 STAINLESS STEEL	AISI 316 STAINLESS STEEL



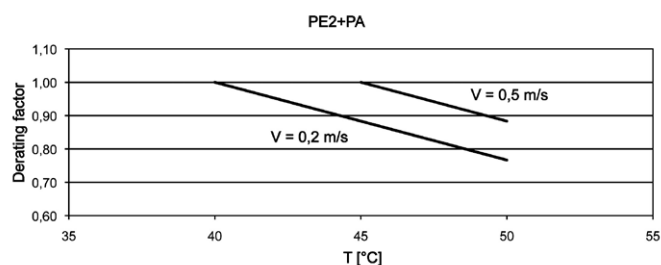
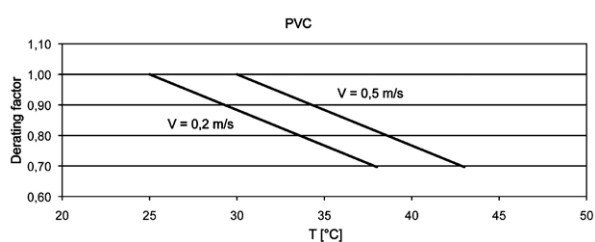
DIMENSIONS -THREE-PHASE MOTORS - 2 poles

TYPE	P2		LENGTH mm	WEIGHT kg	AXIAL THRUST N
	hp	kW			
50 Hz	300	220	1760	663	70000
	340	250	1910	784	70000
	400	294	2020	845	70000
	450	330	2160	906	70000
	500	367	2320	1010	70000
	550	404	2460	1105	70000

DIMENSIONS -THREE-PHASE MOTORS - 4 poles

TYPE	P2		LENGTH mm	WEIGHT kg	AXIAL THRUST N
	hp	kW			
50 Hz	230	170	1910	776	70000
	260	190	2020	855	70000
	300	220	2160	950	70000
	350	257	2320	1065	70000
	400	300	2460	1108	70000

DOWNGRADING



For TR14 220 kW PE2+PA and 250 kW PE2+PA 50 Hz and for all the TR14 60 Hz versions the maximum liquid temperature is 10 °C lower than that indicated in the graph.

ELECTRICAL DATA - THREE-PHASE MOTORS - 2 POLES

MODEL	P2		POWER INPUT 50 Hz	In A	Is/In	P1 W	N min ⁻¹	Cos φ	η %	CABLE	
	hp	kW								∅ mm ²	LC m
TR14 - 220 kW - 380 V - T	300	220	380	423	5,5	247191	2900	0,89	89	6x70 + 1x50	8
TR14 - 250 kW - 380 V - T	340	250	380	479	6	528090	2900	0,89	89	6x70 + 1x50	8
TR14 - 294 kW - 380 V - T	400	294	380	551	5,8	326667	2900	0,9	90	6x95 + 1x50	8
TR14 - 330 kW - 380 V - T	450	330	380	620	6	366667	2900	0,9	90	6x95 + 1x50	8
TR14 - 367 kW - 380 V - T	500	367	380	693	6,4	405525	2900	0,89	90,5	6x95 + 1x50	8
TR14 - 404 kW - 380 V - T	550	404	380	798	6,8	446409	2900	0,85	90,5	6x95 + 1x50	8

ELECTRICAL DATA - THREE-PHASE MOTORS - 4 POLES

MODEL	P2		POWER INPUT 50 Hz	In A	Is/In	P1 W	N min ⁻¹	Cos φ	η %	CABLE	
	hp	kW								∅ mm ²	LC m
TR14 - 170 kW - 380 V - T	230	170	380	356	4	191011	1450	0,81	89	6x70 + 1x50	8
TR14 - 190 kW - 380 V - T	260	190	380	397	4,2	213483	1450	0,82	89	6x70 + 1x50	8
TR14 - 220 kW - 380 V - T	300	220	380	450	4,1	245810	1450	0,83	89,5	6x70 + 1x50	8
TR14 - 257 kW - 380 V - T	350	257	380	525	4	287151	1450	0,83	89,5	6x95 + 1x50	8
TR14 - 294 kW - 380 V - T	400	294	380	612	3,8	326667	1450	0,81	90	6x95 + 1x50	8

P2: Nominal power
V: Nominal voltage
In: Nominal current
Is/In: Starting current/Nominal current
P1: Absorbed power

N: Rotations per minute - R.p.m
Cos φ: Power factor
η: Yield
∅: Cable cross section
LC: Cable length