

6R/8R/10R

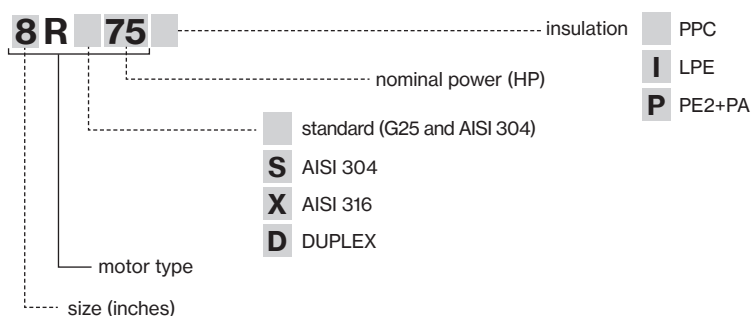
Submersible Well Motors



6", 8", 10" rewindable submersible water-filled motors with NEMA coupling flange and shaftend. Power from 4 kW up to 185 kW. Available in PPC (standard), LPE and PE2+PA insulation class. The motor can be supplied in stainless steel AISI 304, AISI 316 or Duplex EN 1.4462.

Construction features

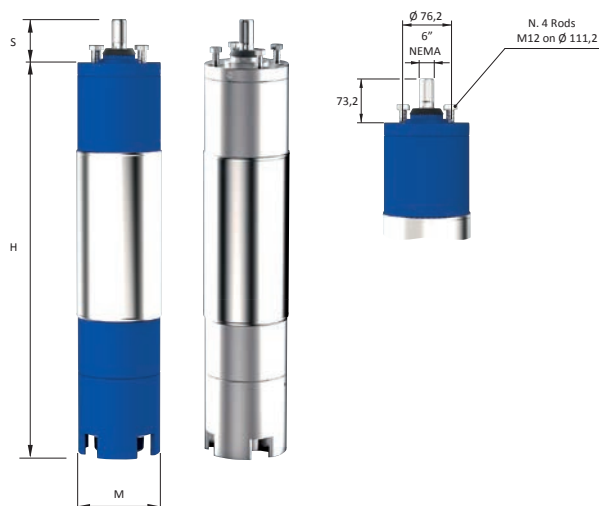
Upper and bottom support	G25 (6R / 8R / 10R)
	stainless steel AISI 304 (6RS / 8RS / 10RS)
	stainless steel AISI 316 (6RX / 8RX / 10RX)
	Duplex EN 1.4462 (6RD / 8RD / 10RD)
Stator sleeve	stainless steel AISI 304 - (R)
	stainless steel AISI 304 - (RS)
	stainless steel AISI 316 - (RX)
	Duplex EN 1.4462 - (RD)
Shaft end	stainless steel AISI 431 - (R)
	stainless steel AISI 431 - (RS)
	stainless steel AISI 316 - (RX)
	Duplex EN 1.4462 - (RD)
Seal type	lip seal (standard); mechanical seal (on request)
Bearings	radial and axial, water lubricated
Thrust bearing	Michell
Voltage	3~ 400V $\pm$ 10% - 50Hz
	3~ 400/690V $\pm$ 10% - 50Hz
Min. cooling flow	0,5 m/s
Insulation class	Y (max 30° C) for PPC
	F (max 50° C) for PE2+PA or LPE
Insulation	PPC (standard)
	PE2 + PA or LPE (on request)
Protection degree	IPX8
Max depth immersion	350m
Available on demand	- PT 100
	- Star/Delta starting
	- Cooling Sleeve
	- Cer./Carb./NBR Seal
	- SIC/SIC/NBR Seal



TYPE	Power		V	I _N	rpm	Efficiency %			Cos Φ			Starting				Axial load N	Start/ hour (max)
	HP	kW		A		50%	75%	100%	50%	75%	100%	Direct		Star-delta	Statoric		
				Cs/Cn								Is / In	Is / In	Is / In			
6R7	7,5	5,5	380	12,4	2846	77,0	82,0	81,0	0,67	0,78	0,83	1,60	5,60	1,90	3,40	16000	15
			400	12,3	2859	76,0	81,0	80,0	0,65	0,76	0,81						
			415	12,3	2880	75,0	80,0	79,0	0,63	0,74	0,79						
6R10	10	7,5	380	16,6	2843	78,0	82,5	82,0	0,68	0,78	0,84	1,80	5,70	1,90	3,40		
			400	16,3	2861	77,0	81,5	81,0	0,66	0,76	0,82						
			415	16,3	2882	76,0	80,5	80,0	0,64	0,74	0,80						
6R12	12,5	9,2	380	20,2	2846	79,0	83,0	82,0	0,68	0,79	0,85	1,80	5,70	1,90	3,40		
			400	19,9	2864	78,0	82,0	81,0	0,66	0,77	0,83						
			415	19,9	2886	77,0	81,0	80,0	0,64	0,75	0,81						
6R15	15	11	380	23,7	2849	80,0	84,5	83,5	0,69	0,79	0,85	1,90	5,90	2,00	3,50		
			400	23,4	2867	79,0	83,5	82,5	0,67	0,77	0,83						
			415	23,4	2882	78,0	82,5	81,5	0,65	0,75	0,81						
6R17	17,5	13	380	27,7	2851	81,0	84,5	84,0	0,69	0,79	0,85	1,80	6,00	2,00	3,60		
			400	27,3	2870	80,0	83,5	83,0	0,67	0,77	0,83						
			415	27,3	2887	79,0	82,5	82,0	0,65	0,75	0,81						
6R20	20	15	380	32	2852	82,0	85,0	84,0	0,69	0,79	0,85	1,70	5,90	2,00	3,50		
			400	31,5	2871	81,0	84,0	83,0	0,67	0,77	0,83						
			415	31,5	2883	80,0	83,0	82,0	0,65	0,75	0,81						
6R25	25	18,5	380	38,9	2854	82,5	85,5	85,0	0,69	0,79	0,85	1,70	5,60	1,90	3,40		
			400	38,3	2873	81,5	84,5	84,0	0,67	0,77	0,83						
			415	38,6	2889	80,0	83,0	82,5	0,65	0,75	0,81						
6R30	30	22	380	45,8	2857	82,5	85,5	85,0	0,70	0,80	0,86	1,70	5,90	2,00	3,50		
			400	45,1	2877	81,5	84,5	84,0	0,68	0,78	0,84						
			415	45,3	2890	80,0	83,0	82,5	0,66	0,76	0,82						
6R35	35	26	380	53,8	2867	82,5	86,0	85,5	0,71	0,81	0,86	1,70	5,70	1,90	3,40		
			400	52,9	2878	81,5	85,0	84,5	0,69	0,79	0,84						
			415	53,2	2891	80,0	83,5	83,0	0,67	0,77	0,82						
6R40	40	30	380	62,1	2861	82,5	86,0	85,5	0,72	0,81	0,86	1,70	5,60	1,90	3,40		
			400	61,1	2880	81,5	85,0	84,5	0,70	0,79	0,84						
			415	61,4	2892	80,0	83,5	83,0	0,68	0,77	0,82						
6R50	50	37	380	77	2863	83,0	86,5	85,0	0,72	0,81	0,86	1,60	5,60	1,90	3,40		
			400	75,8	2882	82,0	85,5	84,0	0,70	0,79	0,84						
			415	76,2	2891	80,5	84,0	82,5	0,68	0,77	0,82						

Service factor: 50Hz=1 - Direction of rotation (view from shaft projection side: anti-clockwise)
Cs = Starting torque - Cn = Nominal couple - Is = Starting current - In = Nominal current

TYPE	Power		Cables		Cable lenght	Max water temperature by winding type	
			Starting				
	HP	kW	Direct	Star Delta	m	PPC	PE2-PA / LPE
			400 V ± 5%	400 / 690 V			
6R7	7,5	5,5	4G × 4 mm²	2×(4G × 4 mm²)	3	30 °C	50 °C
6R10	10	7,5	4G × 4 mm²	2×(4G × 4 mm²)			
6R12	12,5	9,2	4G × 4 mm²	2×(4G × 4 mm²)			
6R15	15	11	4G × 4 mm²	2×(4G × 4 mm²)			
6R17	17,5	13	4G × 6 mm²	2×(4G × 4 mm²)			
6R20	20	15	4G × 6 mm²	2×(4G × 4 mm²)			
6R25	25	18,5	4G × 6 mm²	2×(4G × 4 mm²)			
6R30	30	22	4G × 6 mm²	2×(4G × 4 mm²)			
6R35	35	26	4G × 10 mm²	2×(4G × 6 mm²)			
6R40	40	30	4G × 10 mm²	2×(4G × 6 mm²)			
6R50	50	37	4G × 10 mm²	2×(4G × 10 mm²)			



TYPE	DIMENSIONS			
	H	S	M	
	mm			
6R7	671	73,2	145	45
6R10	701			55
6R12	751			60
6R15	811			65
6R17	841			70
6R20	931			75
6R25	991			83
6R30	1071			92
6R35	1181			100
6R40	1251			108
6R50	1341			118

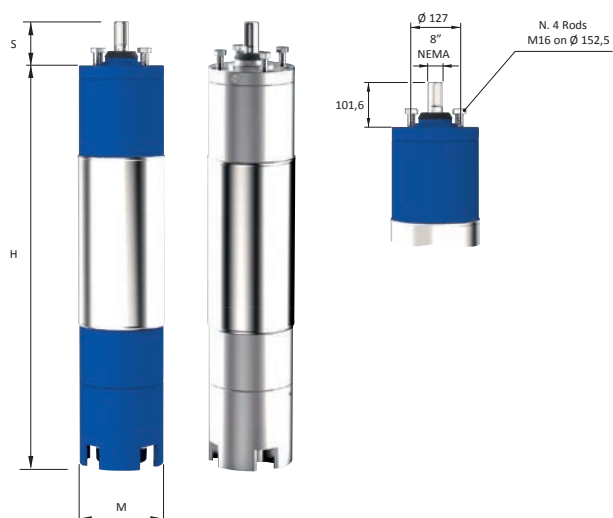
8R-8RS-8RX-8RD

TYPE	Power		V	I _N	rpm	Efficiency %			Cos φ			Starting				Axial load N	Start/hour (max)
	HP	kW				A	50%	75%	100%	50%	75%	100%	Direct		Star-delta		
				Cs/Cn									Is / In	Is / In	Is / In		
8R40	40	30	380	64,4	2859	79,8	85,2	84,3	0,77	0,81	0,84	2,05	6,40	2,10	3,80	45000	10
			400	61,7	2875	80,1	85,0	84,7	0,76	0,80	0,83						
			415	60	2892	79,3	84,5	85,0	0,75	0,79	0,82						
8R50	50	37	380	75,4	2865	80,3	85,7	84,8	0,79	0,83	0,88	1,95	5,70	2,00	3,70		
			400	73	2888	80,6	85,5	85,2	0,77	0,81	0,86						
			415	71,8	2904	79,8	85,0	85,5	0,75	0,79	0,84						
8R60	60	45	380	90,2	2882	80,8	86,2	85,3	0,76	0,86	0,87	1,95	5,80	2,00	3,70		
			400	86,3	2893	81,1	86,0	85,7	0,74	0,81	0,86						
			415	84,8	2905	80,3	85,5	86,0	0,72	0,79	0,84						
8R75	75	55	380	110,2	2880	81,3	86,7	85,8	0,76	0,85	0,89	1,85	5,80	2,00	3,60		
			400	106,2	2889	81,6	86,5	86,2	0,74	0,81	0,87						
			415	105,4	2901	80,8	86,0	86,5	0,72	0,80	0,84						
8R90	90	66	380	130,7	2881	82,4	87,5	86,8	0,76	0,86	0,89	1,85	5,80	2,00	3,50		
			400	126	2892	82,6	87,4	87,2	0,74	0,82	0,87						
			415	125,1	2905	81,9	86,9	87,5	0,72	0,79	0,84						
8R100	100	75	380	148,5	2882	82,3	87,7	86,8	0,75	0,85	0,89	1,80	5,80	2,00	3,50		
			400	143,2	2893	82,6	87,5	87,2	0,73	0,81	0,87						
			415	142,1	2905	81,8	87,0	87,5	0,71	0,77	0,84						
8R125	125	92	380	183,5	2880	83,0	86,0	85,7	0,75	0,84	0,89	1,80	5,70	1,90	3,50		
			400	175,1	2891	83,5	86,5	86,3	0,74	0,83	0,88						
			415	172,7	2903	83,0	86,0	86,3	0,72	0,81	0,86						
8R150	150	110	380	218,6	2885	85,5	86,5	86,0	0,74	0,83	0,89	1,80	5,70	1,90	3,50		
			400	211	2898	86,1	87,0	86,6	0,73	0,82	0,87						
			415	212,1	2908	85,5	86,5	86,0	0,72	0,81	0,84						

Service factor: 50Hz=1 - Direction of rotation (view from shaft projection side: anti-clockwise)

Cs = Starting torque - Cn = Nominal couple - Is = Starting current - In = Nominal current

TYPE	Power		Cables		Cable lenght	Max water temperature by winding type	
			Starting				
	HP	kW	Direct	Star Delta	m	PPC	PE2-PA / LPE
			400 V ± 5%	400 / 690 V			
8R40	40	30	3×1×10 mm ²	6×1×10 mm ²	3	30 °C	50 °C
8R50	50	37	3×1×10 mm ²	6×1×10 mm ²			
8R60	60	45	3×1×16 mm ²	6×1×10 mm ²			
8R75	75	55	3×1×16 mm ²	6×1×10 mm ²			
8R90	90	66	3×1×25 mm ²	6×1×16 mm ²			
8R100	100	75	3×1×25 mm ²	6×1×16 mm ²			
8R125	125	92	3×1×25 mm ²	6×1×16 mm ²			
8R150	150	110	3×1×35 mm ²	6×1×25 mm ²			



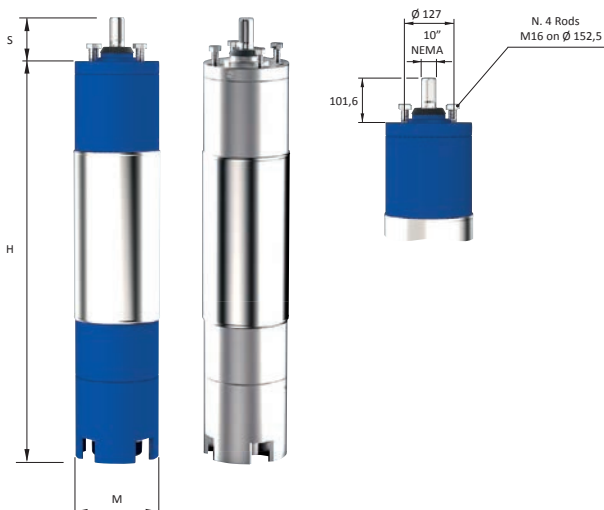
TYPE	DIMENSIONS			
	H	S	M	
	mm			
8R40	993	101,6	194	150
8R50	1043			160
8R60	1123			178
8R75	1233			200
8R90	1302			214
8R100	1383			230
8R125	1583			270
8R150	1733			300

TYPE	Power		V	I _N	rpm	Efficiency %			Cos Φ			Starting				Axial load	Start/ hour (max)
	HP	kW				50%	75%	100%	50%	75%	100%	Direct		Star-delta	Statoric		
				Cs/Cn								Is / In	Is / In	Is / In	N		
10R100	100	75	380	154,3	2884	86,9	87,0	88,0	0,73	0,80	0,84	1,80	6,40	1,90	3,40	60000	10
			400	142,7	2896	85,9	88,0	88,3	0,72	0,84	0,86						
			415	143,9	2909	86,4	88,3	88,5	0,64	0,77	0,82						
10R125	125	92	380	188,7	2890	87,2	87,3	88,3	0,74	0,83	0,84	1,60	6,30	1,80	3,40		
			400	174,5	2904	86,2	88,3	88,6	0,71	0,83	0,86						
			415	176	2914	86,7	88,6	88,8	0,63	0,75	0,82						
10R150	150	110	380	222,2	2930	87,9	88,0	89,0	0,71	0,81	0,85	1,55	6,70	1,80	3,30		
			400	207	2937	86,9	89,0	89,3	0,73	0,84	0,86						
			415	211,3	2943	87,4	89,3	89,5	0,63	0,77	0,81						
10R175	175	130	380	265,6	2895	87,5	88,2	89,0	0,73	0,81	0,83	1,85	5,80	2,00	3,60		
			400	245,3	2915	86,5	89,3	89,4	0,71	0,83	0,85						
			415	244,6	2928	87,1	89,5	89,6	0,62	0,75	0,82						
10R200	200	150	380	299,1	2898	87,1	88,2	89,0	0,72	0,82	0,84	1,55	6,50	1,80	3,30		
			400	277,2	2917	86,1	88,5	89,1	0,71	0,81	0,86						
			415	278,1	2931	86,5	88,1	88,7	0,65	0,75	0,83						
10R225	225	165	380	337,2	2901	86,5	87,5	88,6	0,72	0,82	0,84	1,55	6,50	1,80	3,30		
			400	313,3	2920	85,4	87,2	88,5	0,71	0,81	0,86						
			415	313,9	2930	86,0	87,3	88,2	0,65	0,75	0,83						
10R250	250	185	380	370	2904	87,4	88,0	89,0	0,73	0,83	0,85	1,50	6,50	1,80	3,30		
			400	342,2	2924	86,5	88,7	89,3	0,72	0,82	0,87						
			415	340,9	2936	87,3	89,3	89,5	0,65	0,77	0,84						

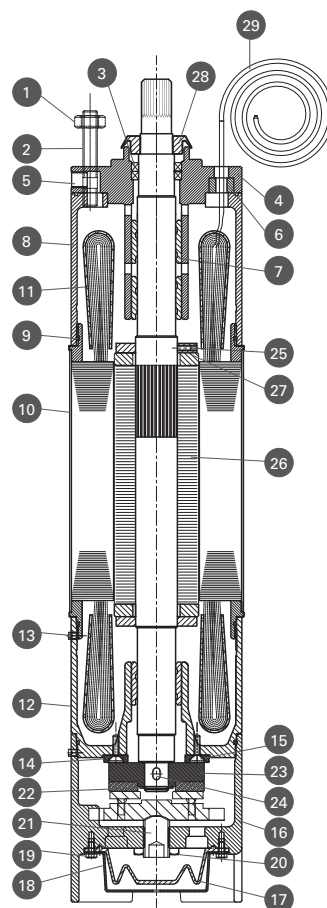
Service factor: 50Hz=1 - Direction of rotation (view from shaft projection side: anti-clockwise)

Cs = Starting torque - Cn = Nominal couple - Is = Starting current - In = Nominal current

TYPE	Power		Cables		Cable lenght	Max water temperature by winding type	
			Starting				
	HP	kW	Direct	Star Delta	m	PPC	PE2-PA / LPE
			400 V ± 5%	400 / 690 V			
10R100	100	75	3×1×25 mm²	6×1×16 mm²	3	30 °C	50 °C
10R125	125	92	3×1×25 mm²	6×1×16 mm²			
10R150	150	110	3×1×35 mm²	6×1×16 mm²			
10R175	175	130	3×1×35 mm²	6×1×25 mm²			
10R200	200	150	3×1×50 mm²	6×1×25 mm²			
10R225	225	165	3×1×50 mm²	6×1×35 mm²			
10R250	250	185	3×1×50 mm²	6×1×35 mm²			



TYPE	DIMENSIONS			
	H	S	M	
	mm			
10R100	1284	101,6	240	270
10R125	1354			310
10R150	1504			350
10R175	1634			385
10R200	1734			415
10R225	1854			444
10R250	1984			480

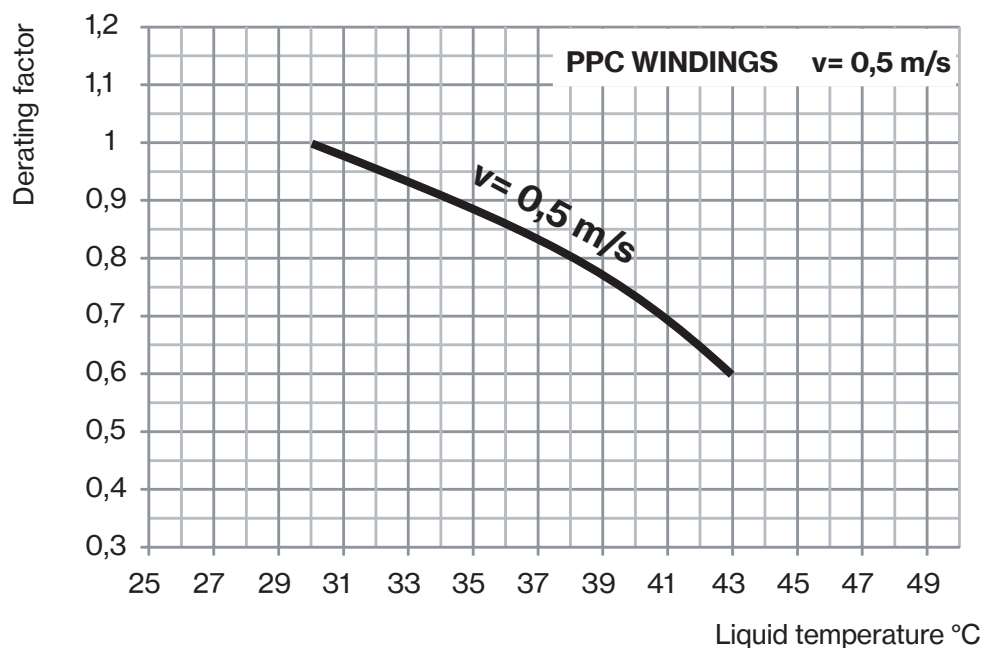


N. CODE	(*) N°	DESCRIPTION	MATERIAL STANDARD VERSION R	MATERIAL VERSION RS-RX-RD
1		N.4 Nuts	AISI 304	AISI 304 / AISI 316 / DUPLEX
2		N.4 Studs	AISI 304	AISI 304 / AISI 316 / DUPLEX
3(*)	1	N.2 Seal rings	NBR	NBR
4		Upper support	CAST IRON	AISI 304 / AISI 316 / DUPLEX
5		N.2 Grains for Liquid filling	AISI 304	AISI 304 / AISI 316 / DUPLEX
6		Grommet	NBR	NBR
7(*)	3	N.3 Bearings	GRAPHITE	GRAPHITE
8		Motor casing	CAST IRON	AISI 304 / AISI 316 / DUPLEX
9(*)	4	N.4 O-ring	NBR	NBR
10		Motor external sleeve	AISI 304	AISI 304 / AISI 316 / DUPLEX
11		N.2 Covers winding protection	POM	POM
12		Lower support	CAST IRON	AISI 304 / AISI 316 / DUPLEX
13		N.3 Screw	AISI 304	AISI 304 / AISI 316 / DUPLEX
14(*)	2	N.2 Disks controsuspention	TEFLON	TEFLON
15		N.2 Screws for controsuspention	AISI 304	AISI 304
16		Base motor	CAST IRON	AISI 304 / AISI 316 / DUPLEX
17(*)	1	Diaphram	NBR	NBR
18		Cover diaphram	AISI 304	AISI 304 / AISI 316 / DUPLEX
19		N.4 Screw for cover diaphram	AISI 304	AISI 304 / AISI 316 / DUPLEX
20		Nut	AISI 304	AISI 304
21		Screw	AISI 304	AISI 304
22		Seeger	AISI 304	AISI 304
23(*)	1	Trust bearing	AISI + GRAPHITE	AISI + GRAPHITE
24		Key	AISI 304	AISI 304
25		N.2 Grains for stabilizer	AISI 304	AISI 304
26		Complete rotor	AISI	AISI
27		N.2 Stabilizers	AISI	AISI
28(*)	1	Deflector	NBR	NBR
29		Cable	H07 RNF	H07 RNF

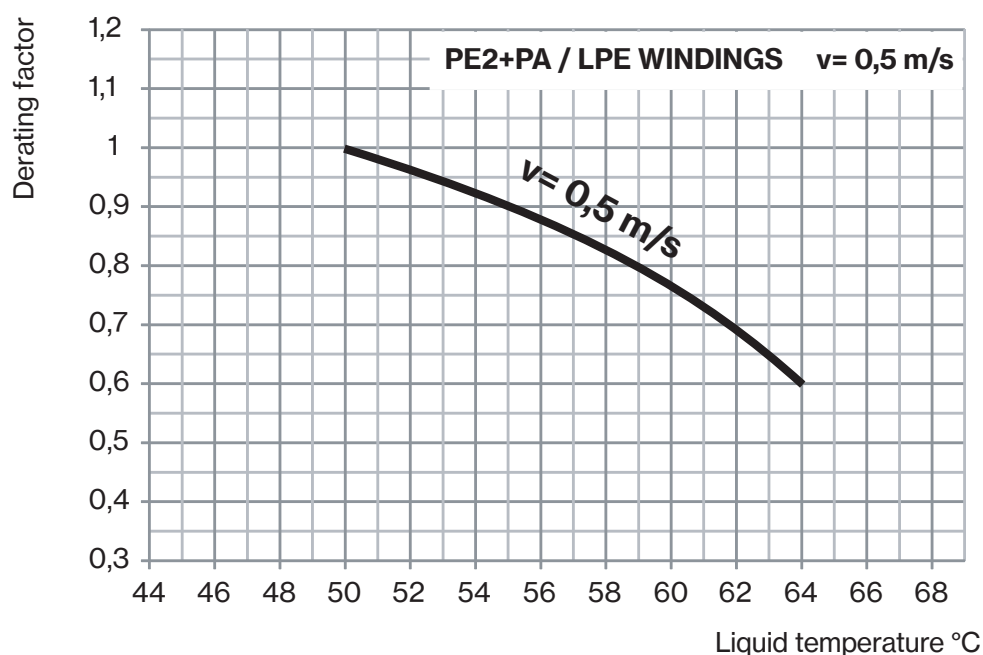
*Reccomended spare parts

OPERATING CONDITIONS AT DIFFERENT WATER TEMPERATURE

All 6" - 8" - 10" standard motors with PPC windings can operate at liquid temperatures up to 30 °C without derating factor. From 31 °C till 43 °C the motors have to be derated according to the factor shown in the following graph.



All 6" - 8" - 10" motors with PE2+PA / LPE windings can operate at liquid temperatures up to 50 °C without derating factor. From 51 °C till 64 °C the motors have to be derated according to the factor shown in the following graph.



Motor size	Max motor starts per hour	Winding max temperature (°C)			Liquid max temperature (°C)		
		PPC	LPE	PE2+PA	PPC	LPE	PE2+PA
6"	15	70	80	80	30	50	50
8"	10	70	80	80	30	50	50
10"	10	70	80	80	30	50	50

PPC = Y insulation class

LPE = F insulation class

PE2+PA = / F insulation class

Minimum liquid velocity for motor 6" - 8" - 10": 0,5 m/s