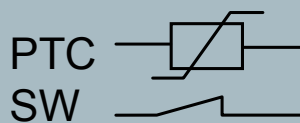
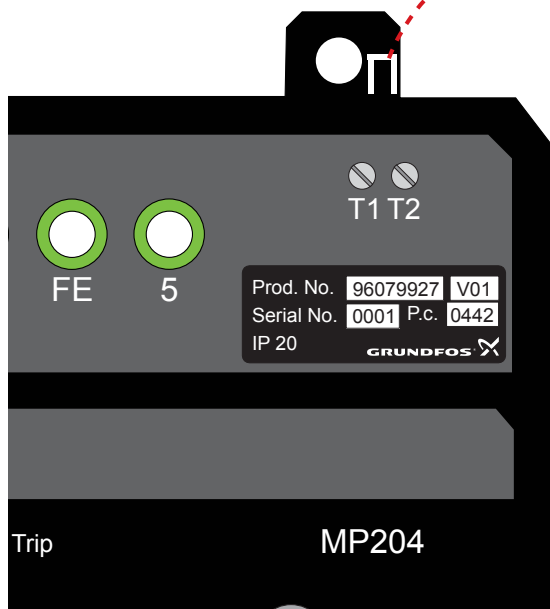


# MP 204

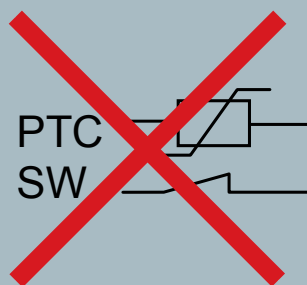
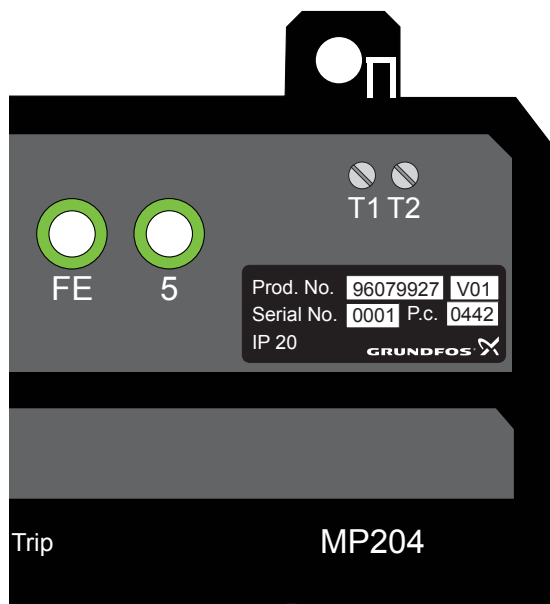


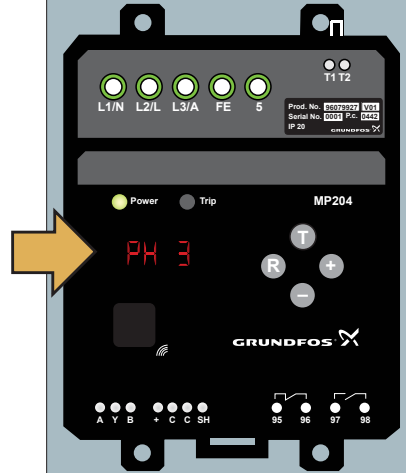
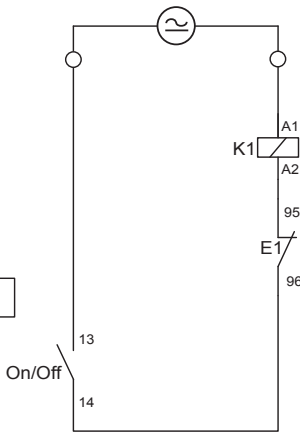
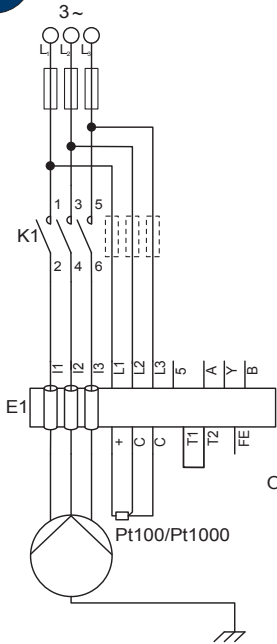
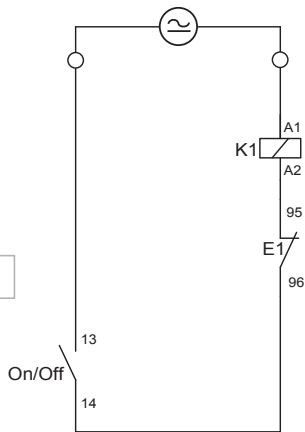
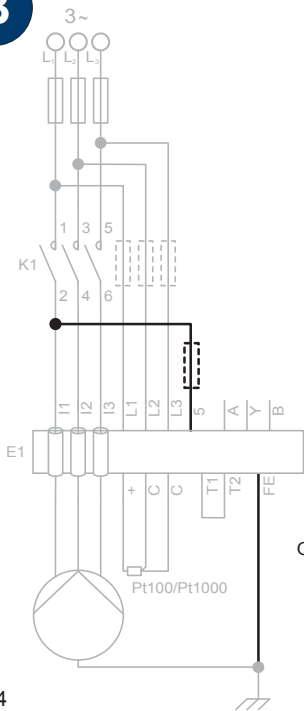


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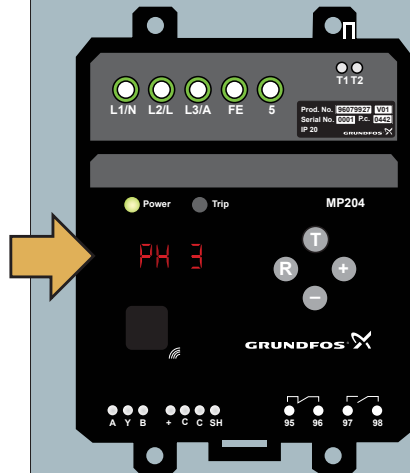
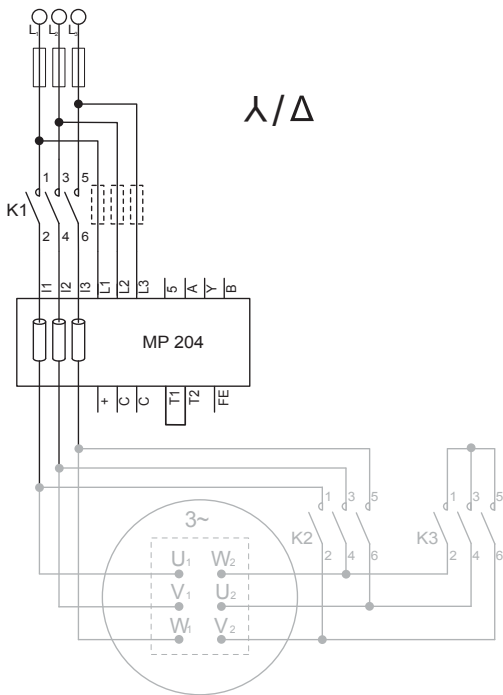


3b

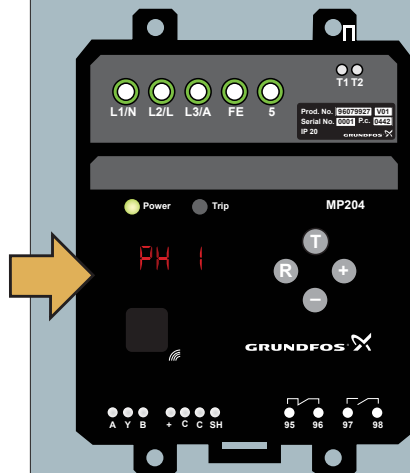
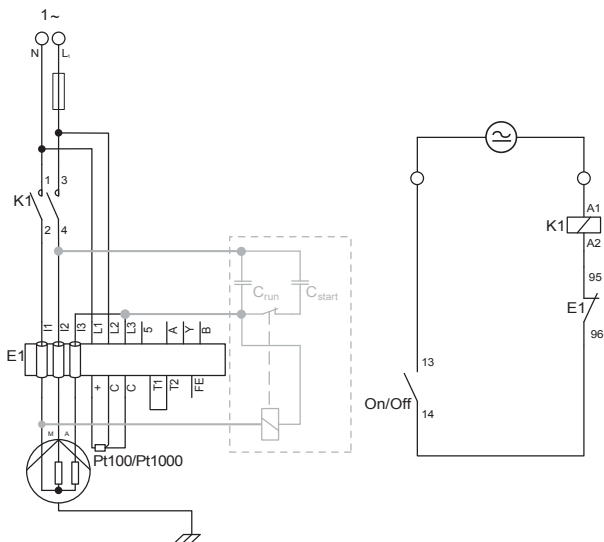


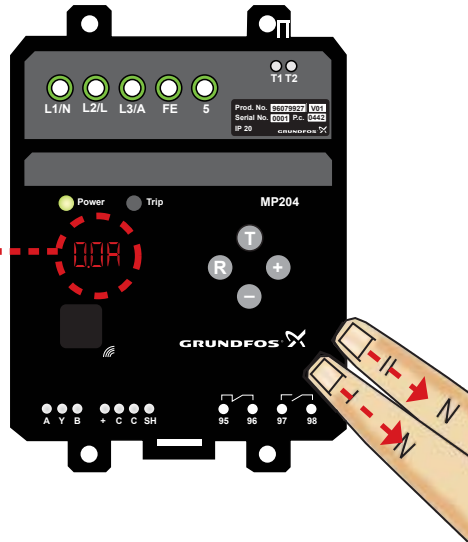
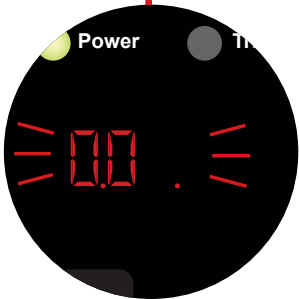
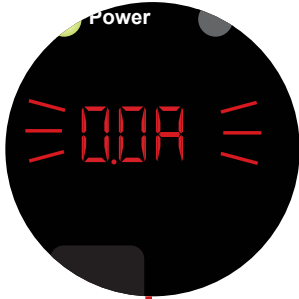
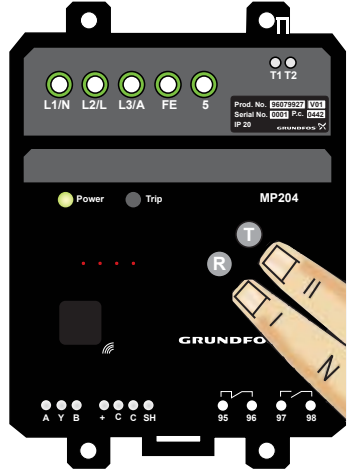
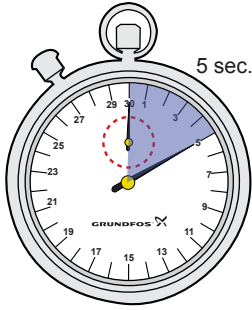
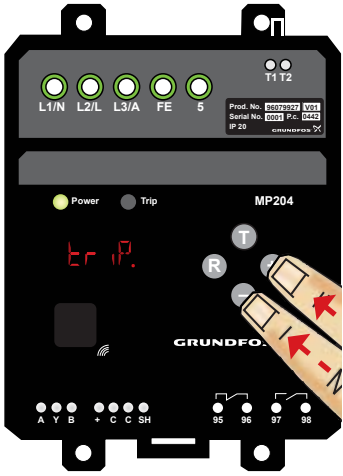
**A****B**

C

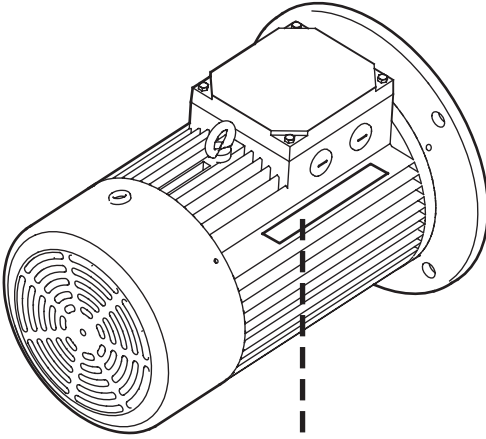


D



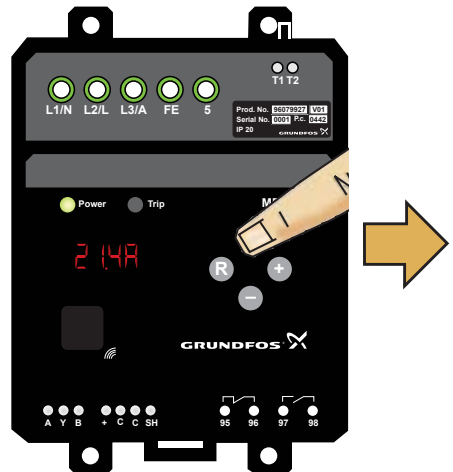
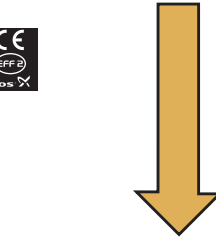
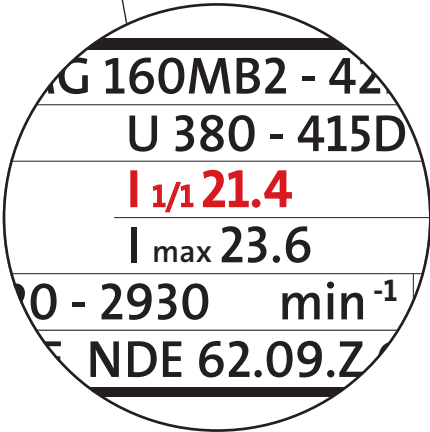


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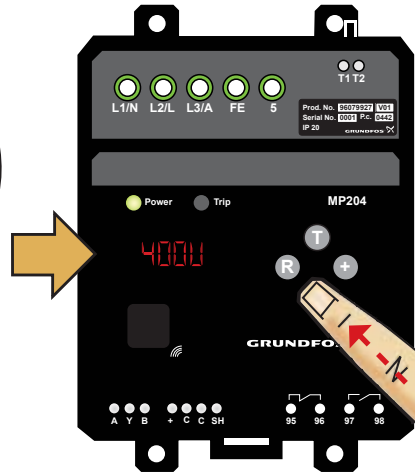
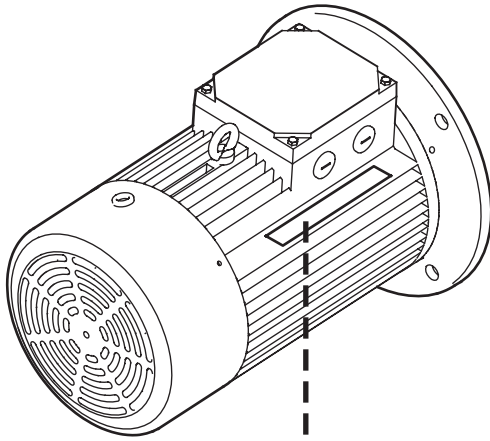


3-MOT MG 160MB2-2FF300-C2	IP55	CLF	IP:11.0	kW/No 85817424	CE
50 Hz U 380 - 415D	V 60	Hz U 380 - 480D	V		
Eff % I <sub>max</sub> 23.6	Δ Eff %	I <sub>max</sub> 23.6 - 19.2	A		
90	A 89 - 91	I <sub>max</sub> 23.6 - 19.2	A		
n 0 - 2930 min <sup>-1</sup>	cos φ 0.89 - 0.87	n 3480 - 3330	min <sup>-1</sup> cos φ 0.90 - 0.86		
DE 73098 NDE 62.09.Z-4	TFP211	In 3480 - 3330	0419	Made in Hungary	GRUNDFOS

3

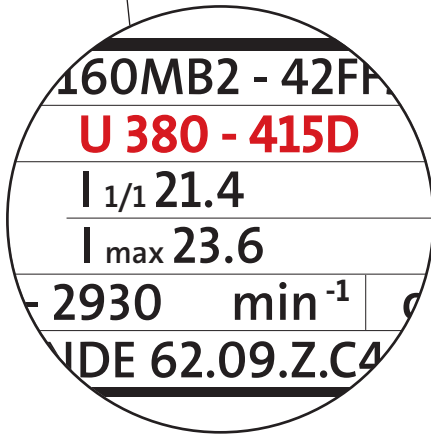


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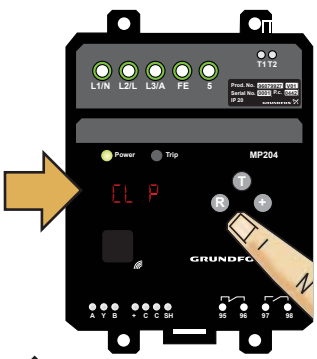
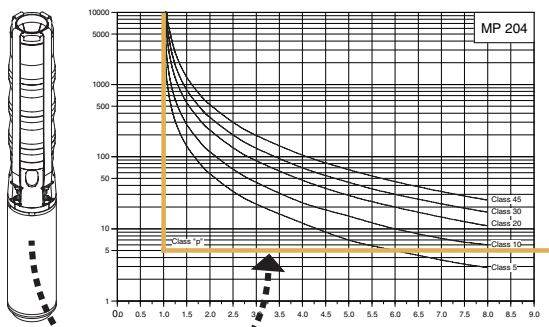
3~ MOT MG 160MB2 - 42FF		IP55		CL F		P <sub>110</sub>		kW No 85817424		CE		
50 Hz	U 380 - 415D	V 50	Hz U 380 - 480D		V					GFCI		
Eff. %	I <sub>1/1</sub> 21.4	A	Eff. %	I <sub>max</sub> 23.6	A							
90	I <sub>max</sub> 23.6	A	89 - 91	I <sub>max</sub> 23.6 - 19.2	A							
n <sub>1</sub> 2920	n <sub>2</sub> 2930	min <sup>-1</sup>	cos φ 0.89 - 0.87	n <sub>1</sub> 3480 - 3530	min <sup>-1</sup>	cos φ 0.90 - 0.86						
DE 7309BE	NNE 62.09.Z.C4	TP211		0419	Made in Hungary		GRUNDFO					

5

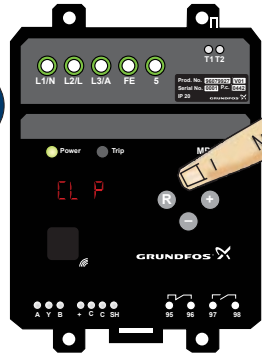




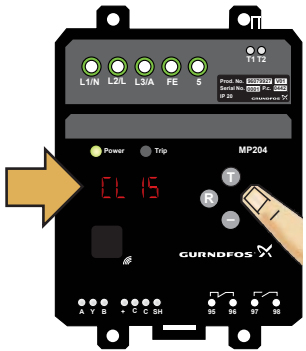
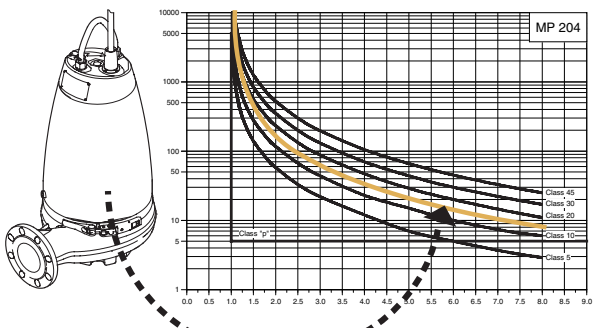
6a



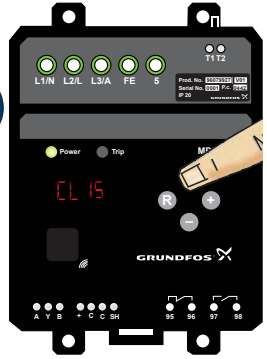
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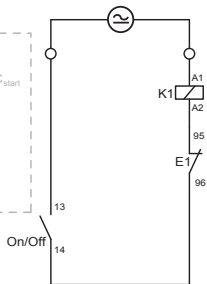
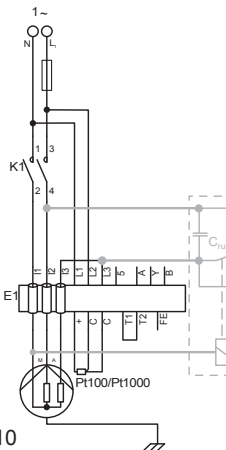
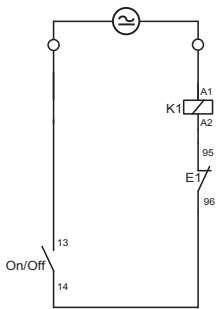
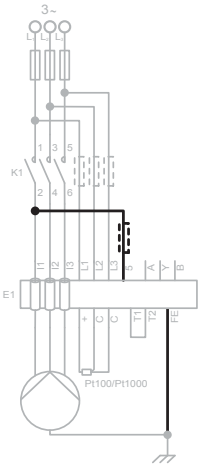
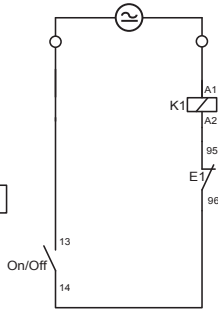
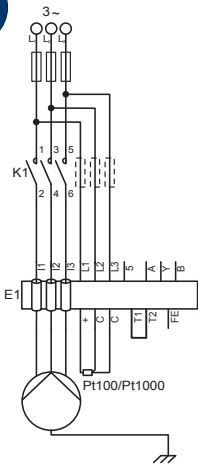


6b

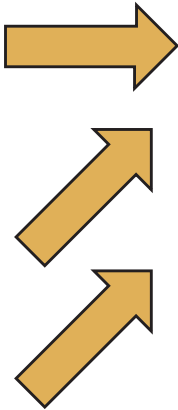


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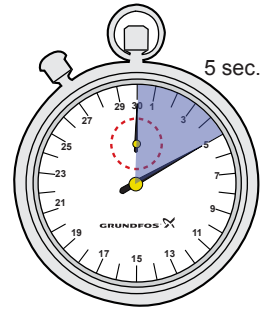
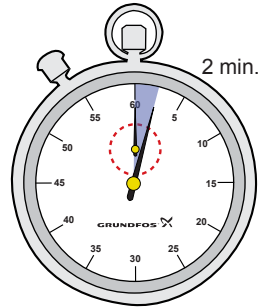


9



10

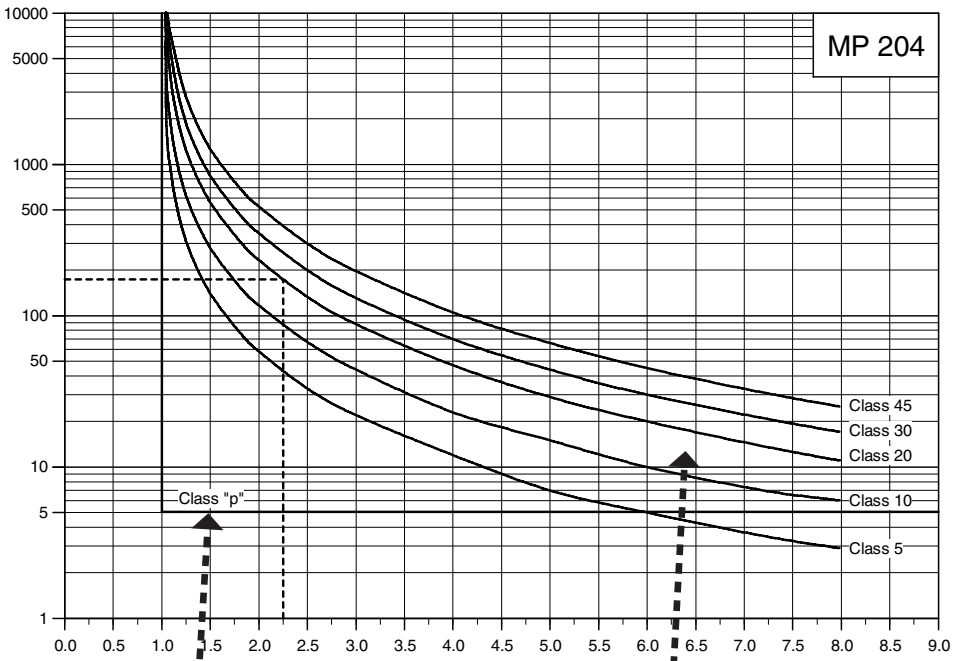




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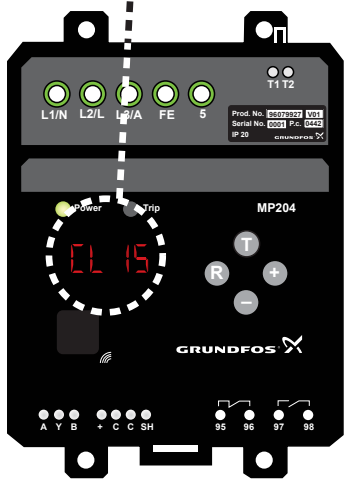
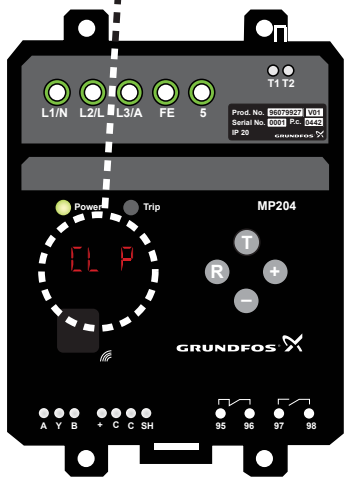


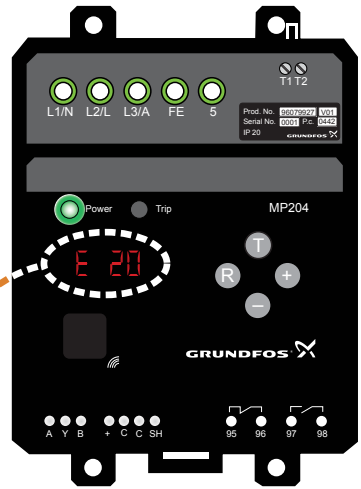
S



MP 204

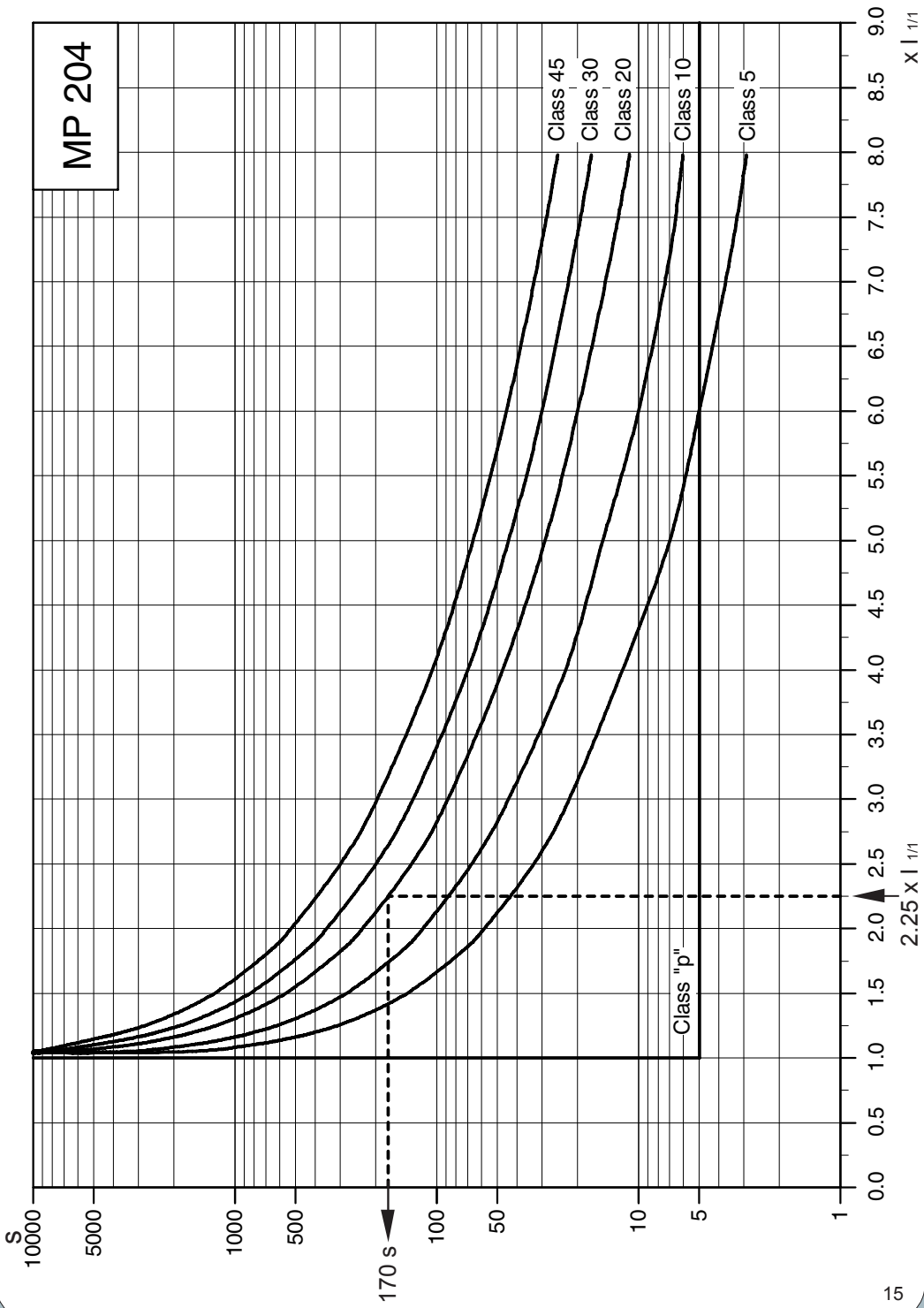
XI 1/1





Fault code	Trip	Warning	Cause of trip/warning
2	A	-	Missing phase
3	A	-	PTC/thermal switch
4	A	-	Too many automatic restarts per 24 hours
9	A	-	Wrong phase sequence
12	-	E	Service warning
15	A	-	Communication alarm for main system
18	A	-	Commanded trip (not in alarm log)
20	A	E	Low insulation resistance
21	-	E	Too many starts per hour
26	-	E	The motor is operating even if the MP 204 is tripped
32	A	E	Overvoltage
40	A	E	Undervoltage
48	A	E	Overload
56	A	E	Underload
64	A	E	Overtemperature, Tempcon measurement
71	A	E	Overtemperature, Pt100/Pt1000 measurement
91	-	E	Signal fault, Tempcon sensor
111	A	E	Current unbalance
112	A	E	Cos ?, max.
113	A	E	Cos ?, min.
120	A	-	Auxiliary winding fault
123	A	E	Starting capacitor, low
124	A	E	Run capacitor, low
175	-	E	Signal fault, Pt100/Pt1000 sensor

# MP 204



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