

## Motor type test certificate (2.2)

(Inspection document acc. EN 10204)

Asynchronous motor  
Travel motor

**4 F 48 / 210.453**  
**4 F 48 / 220.453**

<b>*Type of motor</b>			
Operating characteristic	EN 60034-1		
<b>*Duty type</b>		S3	
<b>*Thermal classification</b>		Th. Cl. F	
Location heights	h [m]	1000	
<b>*Ambient temperature</b>	9a [°C]	40	
<b>*Type of protection</b>	EN 60034-5	IP 55 / IP66	
Cooling method	EN 60034-6	IC 411	
<b>*Disconnection temperatur of thermistor</b>	9s [°C]	145	
<b>*Mass moment of inertia</b>		0,0057 [kgm²]	
Mouting position	EN 60034-7	IM B5 [Code I]	
Frame size		100	
Weight	m [kg]	25	

<b>*Number of poles</b>		4
Starting torque	T <sub>A</sub> [Nm]	31
Mid run up torque	T <sub>H</sub> [Nm]	28
Pull-out (breakdown) torque	T <sub>K</sub> [Nm]	40
<b>*braking torque</b>	T <sub>B</sub> [Nm]	20

Brake type		FDW 13
Thermal classification brake	Th. Cl.	F

*Rated output			*Duty cycle	*Rated speed			Rated load torque T <sub>N</sub> [Nm]	*Operating voltage		Dimensioning voltage U <sub>N</sub> [V]	*Frequency			*Coil voltage brake U <sub>B</sub> [V]	Coil power brake P <sub>B</sub> (20°C) [W]	No-load current			*Rated current			*Rated power factor cos φ <sub>N</sub>	Locked rotor current		Power factor short circuit cos φ <sub>K</sub>	Efficiency η [%]	Terminal resistance [Ω]		Rectifier type Precima			*Switching frequency factor - temperature dependent (valide for all voltages)					
				50 Hz	87 Hz	100 Hz		U <sub>B</sub> [V]	U <sub>N</sub> [V]		f <sub>N</sub> [Hz]	I <sub>0</sub> [A]	I <sub>N</sub> [A]			I <sub>K</sub> [A]	50 Hz	87 Hz	100 Hz	50 Hz	87 Hz		η [%]	Y			Δ	Y	Δ	PME 400	PME 500			PMEA 600 S	9a	A <sub>C</sub>	
1,60	2,8	3,2	60	1425	2470	2850	10,7	190...210	200	64 / 84	50	87	100	104 / 120	64 / 84	6,8	11,8	8,6	14,9	17,2	0,71	46	80	0,83	76	1,8	0,6	X			40	1000					
								220...240	230		180 / 207							5,9	10,2	7,5		13,0	15,0				40	69						45	950		
								380...415	400		225 / 259							3,4	5,9	4,3		7,4	8,6				23	40							50	900	
								420...460	440		104 / 120 1)							3,1	5,4	3,9		6,8	7,8				21	36							55	850	
								480...525	500									2,7	4,7	3,4		6,0	6,9				18,4	32							60	800	
								575...630	600									2,3	3,9	2,9		5,0	5,7				15,3	27							65	750	
								660...720	690									2,0	3,4	2,5		4,3	5,0				13,3	23							70	700	
								190...210	200									7,8	13,5	9,9		17,1	19,8				53	92			1,5	0,5	X			80	600
1,9	3,3	3,8	60	1710	2960	3420	10,7	220...240	230	64 / 84	60	104	120	104 / 120	64 / 84	6,8	11,8	8,6	14,9	17,2	0,71	46	80	0,83	79	1,8	0,6	X									
								380...415	400		180 / 207							3,9	6,8	4,9		8,6	9,9				26	46									
								440...480	460		225 / 259							3,4	5,9	4,3		7,4	8,6				23	40									
								550...600	575		104 / 120 1)							2,7	4,7	3,4		6,0	6,9				18,4	32									
								660...720	690									2,3	3,9	2,9		5,0	5,7				15,3	27									
								190...210	200									7,8	13,5	9,9		17,1	19,8				53	92			1,5	0,5	X				

**\*Name plate data motor**

All motors are lay out for dimensioning voltage.

Voltage: operating voltage range +5 % and frequency +- 2 % acc. EN 60034.

Using the tolerance the temperature exceeds the permitted limit temperature of the thermal class up to 10 K.

1) external control voltage for brake: 230 V AC x 0,45 = 104 V DC

2) The values for 100/120 Hz are values for the operating point in the field weakening range at nominal torque

This test certificate is made by EDP and is effective without signature.

Customer:

Order No:

Serial No: