

TETRA COMPACT-X 100 RATINGS AND SPECIFICATIONS

TIME RATING
INSULATION CLASS
ENCLOSURE
PROTECTION CLASS
INSULATION SYSTEM UL

Continuous
F
Totally enclosed. Self-cooled
IP 65 standard on the body
cURus , DV155J File nr.:E216686

AMBIENT TEMPERATURE
AMBIENT HUMIDITY
POLES
THERMAL PROTECTION
CE certified

-40 to 80 °C
5 to 85% (non-condensing)
8
PT 1000

TC-X 100 3,2 21

TC-X 100 3,2 15

			Ambient temperature			Ambient temperature		
			-40°C	0 ÷ +40°C	+80°C	-40°C	0 ÷ +40°C	+80°C
Continuous stall torque	M_0	Nm	3,75	3,20	2,30	3,75	3,2	2,30
Peak torque	M_{max}	Nm	11,0	11,0	11,0	11,0	11,0	11,0
Nominal torque	M_n	Nm	3,16	2,61	1,71	3,16	2,61	1,71
Rated voltage	U_n	V	230	230	230	400	400	400
Nominal power	P_N	W	990	820	535	990	820	535
Continuous stall current	I_0	A_{rms}	7,08	6,08	4,08	4,18	3,52	2,10
Maximum current	I_{max}	A_{rms}	20,91	20,91	20,91	12,09	12,09	12,09
Nominal current	I_N	A_{rms}	5,95	5,11	3,43	3,51	2,96	1,76
Nominal working speed	n_N	min^{-1}	3000	3000	3000	3000	3000	3000
Maximum working speed 230VAC	n_{max}	min^{-1}	5000	5000	5000	3900	3900	3900
Maximum working speed 400VAC	n_{max}	min^{-1}	-	-	-	5000	5000	5000
Torque constant	k_t	Nm/A_{rms}	0,526	0,526	0,526	0,910	0,910	0,910
Voltage constant	K_{eu-v}	$V_{rms}/Krpm$	31,8	31,8	31,8	55,0	55,0	55,0
Winding resistance	R_{20u-v}	Ohm	1,1	1,1	1,1	2,90	2,90	2,90
Winding inductance	L_{qu-v}	mH	4,44	4,44	4,44	13,28	13,28	13,28
Electrical time constant	T_e	ms	4,03	4,03	4,03	4,58	4,58	4,58
Thermal resistance	°C/W	°C/W	1,0	1,0	1,0	1,0	1,0	1,0
Mechanical time constant	T_m	ms	0,92	0,92	0,92	0,81	0,81	0,81
Rotor inertia ^(*)	J_M	$Kgcm^2$	1,55	1,55	1,55	1,55	1,55	1,55
Mass	m	Kg	3,9	3,9	3,9	3,9	3,9	3,9
Maximum axial shaft load	N	225 (applied on the shaft's center)						
Maximum radial shaft load	N	626 (applied on the shaft's center)						

Rated Output with 300 x 300 x 6 mm aluminum heat sink flange coupling - Derating must be considered if the oil seal is applied - IP 54 standard shaft bushing
(*) without feedback

SEE IT BEFORE IT HAPPENS

**MOTOR
POWER**
COMPANY

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TC-X 100 5,6 15

TC-X 100 8 15

Ambient temperature

Ambient temperature

-40°C 0 ÷ +40°C +80°C -40°C 0 ÷ +40°C +80°C

Continuous stall torque	M_0	Nm	6,48	5,60	4,47	9,27	8,00	6,35
Peak torque	M_{max}	Nm	22,0	22,0	22,0	33,0	33,0	33,0
Nominal torque	M_n	Nm	5,08	4,20	3,07	6,27	5,0	3,35
Rated voltage	U_n	V	400	400	400	400	400	400
Nominal power	P_N	W	1600	1320	965	1970	1570	1050
Continuous stall current	I_0	A_{rms}	7,12	6,15	4,24	10,19	8,79	6,02
Maximum current	I_{max}	A_{rms}	24,18	24,18	24,18	36,27	36,27	36,27
Nominal current	I_N	A_{rms}	5,51	4,76	3,28	6,56	5,66	3,88
Nominal working speed	n_N	min^{-1}	3000	3000	3000	3000	3000	3000
Maximum working speed 230VAC	n_{max}	min^{-1}	3900	3900	3900	3900	3900	3900
Maximum working speed 400VAC	n_{max}	min^{-1}	5000	5000	5000	5000	5000	5000
Torque constant	k_t	Nm/A_{rms}	0,910	0,910	0,910	0,910	0,910	0,910
Voltage constant	K_{eu-v}	$V_{rms}/Krpm$	55,0	55,0	55,0	55,0	55,0	55,0
Winding resistance	R_{20u-v}	Ohm	1,17	1,17	1,17	0,69	0,69	0,69
Winding inductance	L_{qu-v}	mH	6,33	6,33	6,33	4,22	4,22	4,22
Electrical time constant	T_e	ms	5,41	5,41	5,41	6,12	6,12	6,12
Thermal resistance	°C/W	°C/W	0,95	0,95	0,95	0,78	0,78	0,78
Mechanical time constant	T_m	ms	0,62	0,62	0,62	0,51	0,51	0,51
Rotor inertia ^(*)	J_M	$Kgcm^2$	2,91	2,91	2,91	4,1	4,1	4,1
Mass	m	Kg	5,6	5,6	5,6	7,3	7,3	7,3
Maximum axial shaft load	N		225 (applied on the shaft's center)					
Maximum radial shaft load	N		626 (applied on the shaft's center)					

Rated Output with 300 x 300 x 6 mm aluminum heat sink flange coupling - Derating must be considered if the oil seal is applied - IP 54 standard shaft bushing
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