TETRA COMPACT-X 80 RATINGS AND SPECIFICATIONS Sizes 1,5

TIME RATING	Continuous	AMBIENT TEMPERATURE	-40 to +80 °C
INSULATION CLASS	F	AMBIENT HUMIDITY	5 to 85% (non-condensing)
ENCLOSURE	Totally enclosed. Self-cooled	POLES	8
PROTECTION CLASS	IP 65 standard on the body	THERMAL PROTECTION	PT 1000
INSULATION SYSTEM UL	cURus , DV155J File nr.:E216686	CE certified	

			TC-X 80 1,5 21			TC-X 80 1,5 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	2,01	1,74	1,35	2,01	1,74	1,35
Peak torque	M_{max}	Nm	4,5	4,5	4,5	4,5	4,5	4,5
Nominal torque	M_n	Nm	1,80	1,53	1,13	1,80	1,53	1,13
Rated voltage	Un	V	230	230	230	400	400	400
Nominal power	P_N	W	565	480	355	565	480	355
Continuous stall current	I_0	A_{rms}	3,83	3,31	2,28	2,23	1,91	1,26
Maximum current	Imax	A_{rms}	8,55	8,55	8,55	4,95	4,95	4,95
Nominal current	I_N	A_{rms}	3,46	2,99	2,06	2,02	1,73	1,14
Nominal working speed	nN	min^{-1}	3000	3000	3000	3000	3000	3000
Maximum working speed 230VAC	nmax	min^{-1}	5000	5000	5000	3900	3900	3900
Maximum working speed 400VAC	nmax	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}	Vrms/Krpm	31,8	31,8	31,8	55,0	55,0	55,0
Winding resistance	R_{20u-v}	Ohm	2,3	2,3	2,3	6,5	6,5	6,5
Winding inductance	L_{qu-v}	mH	7,4	7,4	7,4	22,2	22,2	22,2
Electrical time constant	Te	ms	3,2	3,2	3,2	3,4	3,4	3,4
Thermal resistance	°C/W	°C/W	1,67	1,67	1,67	1,67	1,67	1,67
Mechanical time constant	Tm	ms	0,80	0,80	0,80	0,75	0,75	0,75
Rotor inertia (a)	J_M	$Kgcm^2$	0,64	0,64	0,64	0,64	0,64	0,64
Mass	m	Kg	2,25	2,25	2,25	2,25	2,25	2,25
Maximum axial shaft load	N		110 (applied on the shaft's center)					
Maximum radial shaft load	N		350 (applied on the shaft's center)					

Rated output with 250 x 250 x 6 mm aluminum heat sink flange coupling - Derating must be considered if the oil seal is applied - IP 54 standard shaft bushing
(a) without feedback

TETRA COMPACT-X 80 RATINGS AND SPECIFICATIONS Sizes 2,8

TIME RATING	Continuous	AMBIENT TEMPERATURE	-40 to +80 °C
INSULATION CLASS	F	AMBIENT HUMIDITY	5 to 85% (non-condensing)
ENCLOSURE	Totally enclosed. Self-cooled	POLES	8
PROTECTION CLASS	IP 65 standard on the body	THERMAL PROTECTION	PT 1000
INSULATION SYSTEM UL	cURus , DV155J File nr.:E216686	CE certified	

			TC-X 80 2,8 21			TC-X 80 2,8 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	3,43	2,96	2,35	3,43	2,96	2,35
Peak torque	M_{max}	Nm	8,4	8,4	8,4	8,4	8,4	8,4
Nominal torque	M_n	Nm	3,02	2,55	1,94	3,02	2,55	1,94
Rated voltage	Un	V	230	230	230	400	400	400
Nominal power	P_N	W	950	800	610	950	800	610
Continuous stall current	I_0	A_{rms}	6,53	5,63	3,83	3,76	3,25	2,23
Maximum current	Imax	A_{rms}	15,97	15,97	15,97	9,23	9,23	9,23
Nominal current	I_N	A_{rms}	5,79	4,99	3,39	3,34	2,88	1,98
Nominal working speed	nN	min^{-1}	3000	3000	3000	3000	3000	3000
Maximum working speed 230VAC	nmax	min^{-1}	5000	5000	5000	3900	3900	3900
Maximum working speed 400VAC	nmax	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}	Vrms/Krpm	31,8	31,8	31,8	55,0	55,0	55,0
Winding resistance	R_{20u-v}	Ohm	0,99	0,99	0,99	3,0	3,0	3,0
Winding inductance	L_{qu-v}	mH	4,4	4,4	4,4	13,2	13,2	13,2
Electrical time constant	Te	ms	4,4	4,4	4,4	4,4	4,4	4,4
Thermal resistance	°C/W	°C/W	1,32	1,32	1,32	1,32	1,32	1,32
Mechanical time constant	Tm	ms	0,62	0,62	0,62	0,63	0,63	0,63
Rotor inertia (a)	J_M	$Kgcm^2$	1,16	1,16	1,16	1,16	1,16	1,16
Mass	m	Kg	3,05	3,05	3,05	3,05	3,05	3,05
Maximum axial shaft load	N		110 (applied on the shaft's center)					
Maximum radial shaft load	N		350 (applied on the shaft's center)					

Rated output with 250 x 250 x 6 mm aluminum heat sink flange coupling - Derating must be considered if the oil seal is applied - IP 54 standard shaft bushing
(a) without feedback

TETRA COMPACT-X 80 RATINGS AND SPECIFICATIONS Sizes 4

TIME RATING	Continuous	AMBIENT TEMPERATURE	-40 to +80 °C
INSULATION CLASS	F	AMBIENT HUMIDITY	5 to 85% (non-condensing)
ENCLOSURE	Totally enclosed. Self-cooled	POLES	8
PROTECTION CLASS	IP 65 standard on the body	THERMAL PROTECTION	PT 1000
INSULATION SYSTEM UL	cURus , DV155J File nr.:E216686	CE certified	

			TC-X 80 4 15			TC-X 80 4 17		
			Ambient temperature			Ambient temperature		
			-40°C	0 ÷ +40°C	+80°C	-40°C	0 ÷ +40°C	+80°C
Continuous stall torque	M_0	Nm	4,65	4,0	2,90	4,65	4,0	2,90
Peak torque	M_{max}	Nm	12,0	12,0	12,0	12,0	12,0	12,0
Nominal torque	M_n	Nm	4,05	3,40	2,30	4,05	3,40	2,30
Rated voltage	Un	V	230	230	230	400	400	400
Nominal power	P_N	W	1270	1068	720	1270	1068	720
Continuous stall current	I_0	A_{rms}	5,20	4,40	2,68	2,91	2,50	1,68
Maximum current	Imax	A_{rms}	13,19	13,19	13,19	7,50	7,50	7,50
Nominal current	I_N	A_{rms}	4,55	3,85	2,35	2,55	2,19	1,47
Nominal working speed	nN	min^{-1}	3000	3000	3000	3000	3000	3000
Maximum working speed 230VAC	nmax	min^{-1}	3900	3900	3900	-	-	-
Maximum working speed 400VAC	nmax	min^{-1}	5000	5000	5000	3900	3900	3900
Torque constant	k_t	Nm/A_{rms}	0,910	0,910	0,910	1,600	1,600	1,600
Voltage constant	K_{eu-v}	Vrms/Krpm	55,0	55,0	55,0	96,0	96,0	96,0
Winding resistance	R_{20u-v}	Ohm	1,9	1,9	1,9	6,5	6,5	6,5
Winding inductance	L_{qu-v}	mH	8,9	8,9	8,9	28,6	28,6	28,6
Electrical time constant	Te	ms	4,7	4,7	4,7	4,4	4,4	4,4
Thermal resistance	°C/W	°C/W	1,0	1,0	1,0	1,0	1,0	1,0
Mechanical time constant	Tm	ms	0,54	0,54	0,54	0,60	0,60	0,60
Rotor inertia (a)	J_M	$Kgcm^2$	1,58	1,58	1,58	1,58	1,58	1,58
Mass	m	Kg	4,1	4,1	4,1	4,1	4,1	4,1
Maximum axial shaft load	N		110 (applied on the shaft's center)					
Maximum radial shaft load	N		350 (applied on the shaft's center)					

Rated output with 250 x 250 x 6 mm aluminum heat sink flange coupling - Derating must be considered if the oil seal is applied - IP 54 standard shaft bushing
(a) without feedback