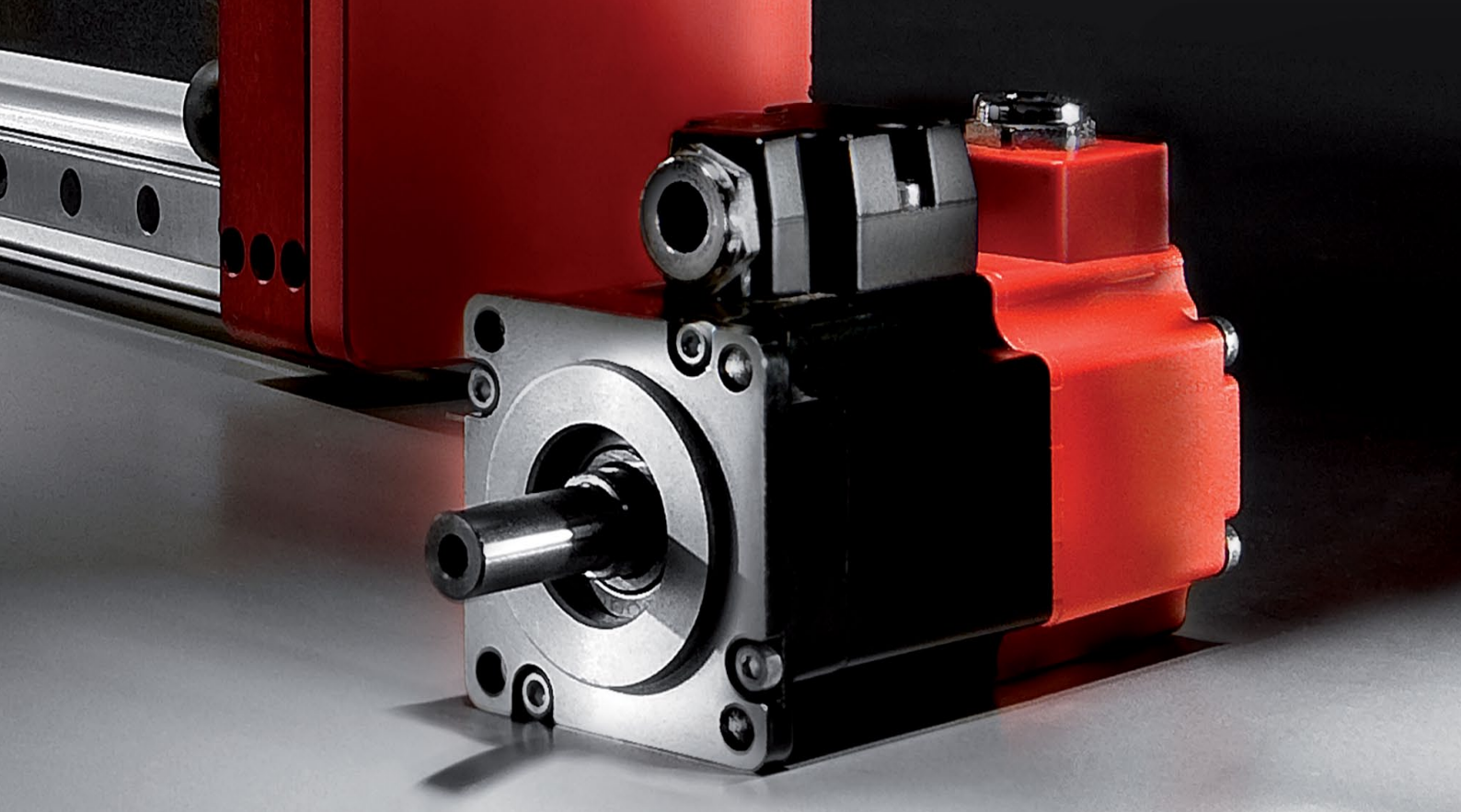


TETRA COMPACT BRUSHLESS SERVOMOTORS

MOTORS

**MOTOR
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COMPANY



Motor Power Company
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info@motorpowerco.it

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**WELCOME TO
MOTOR POWER COMPANY**

The brushless servomotor is a product of tried-and-tested success that Motor Power Company manufacturers thanks to in-company know-how acquired during years of practical experience with designing and building motors.

TETRA COMPACT belongs to the low power range and stands out for its constructional shape; it is particularly suitable for positioning tasks in industrial robotic, machine tools, actuators and machine automation with demanding requirements in terms of dynamics and stability. Motor Power Company proposes not just components but complete motion solutions, combining brushless servomotors with a series of drives with high flexibility and exceptional capabilities in a wide range of applications.

BRUSHLESS

TECHNOLOGY

FEATURES AND BENEFITS

Synchronous brushless servomotor, permanently excited

Rated output power from 60W to 1,6kW

Maximum servomotor speed up to 5000Rpm

Insulation class F (155 C°)

IP 65 on motor body

Ral 9005 black powder coating

Temperature protection by KTY 84 (excluding TC 40)

Shaft balancing class G 2,5 according ISO 1940

Smooth or keyed shaft

Built-in feedback resolver 2 poles, TTL Encoder, Absolute Multiturn Encoder (Hiperface)

Cable flange with connectors for TC 40

90° round circular turnable connectors (IP 67) for TC 60 - 80 - 100

Optional electromagnetic permanent-holding brake. Zero backlash

Optional shaft sealing



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TETRA COMPACT

BRUSHLESS SERVOMOTORS

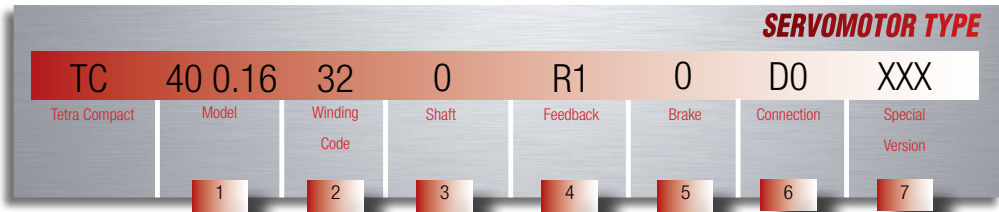
PRODUCT LINEUP

Servomotor Type	Rated Output Power [W]	Rated Torque [Nm]	Peak Torque [Nm]	Rated Voltage [V]	Rated Speed [rpm]	Drive Type
TC 40 0,16 32	60	0,20	0,48	24	3000	-
TC 40 0,16 01	60	0,20	0,48	48	3000	-
TC 40 0,32 01	100	0,32	0,96	48	3000	-
TC 40 0,32 21	100	0,32	0,96	230	3000	BASIC PRO 2A-230V
TC 60 0,65 21	200	0,64	1,95	230	3000	BASIC PRO 2A-230V
TC 60 1,3 21	370	1,17	3,90	230	3000	BASIC PRO 2A-230V
TC 60 1,3 15	370	1,17	3,90	400	3000	BASIC PRO 5A-400V
TC 80 1,5 21	480	1,53	4,50	230	3000	BASIC PRO 5A-230V
TC 80 1,5 15	480	1,53	4,50	400	3000	BASIC PRO 5A-400V
TC 80 2,8 21	800	2,54	8,40	230	3000	BASIC PRO 5A-230V
TC 80 2,8 15	800	2,54	8,40	400	3000	BASIC PRO 5A-400V
TC 100 3,2 21	820	2,62	11,00	230	3000	BASIC PRO 10A-230V
TC 100 3,2 15	820	2,62	11,00	400	3000	BASIC PRO 5A-400V
TC 100 5,6 15	1320	4,20	22,00	400	3000	BASIC PRO 10A-400V
TC 100 8 15	1570	5,00	33,00	400	3000	BASIC PRO 10A-400V

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SERVOMOTOR TYPE



1 Model

0.16 - 0.32 for model 40
0.65 - 1.3 for model 60
1.5 - 2.8 for model 80
3.2 - 5.6 - 8 for model 100

2 Winding code

	TC 40 0.16	TC 40 0.32	TC 60 0.65	TC 60 1.3	TC 80 1.5	TC 80 2.8	TC 100 3.2	TC 100 5.6	TC 100 8
1	•	•	-	-	-	-	-	-	-
15	-	-	-	•	•	•	•	•	•
21	-	•	•	•	•	•	•	-	-
32	•	-	-	-	-	-	-	-	-

3 Shaft

0 - Shaft with key / without oil seal (front flange side IP 42)
1 - Shaft with key / with oil seal (front flange side IP 65)
2 - Shaft without key / without oil seal (front flange side IP 42)
3 - Shaft without key / with oil seal (front flange side IP 65)

N.B.: All motor body are IP 65

4 Feedback

E1 - Encoder TTL 2000ppr
R1 - Resolver 2p
A1 - Absolute Multiturn Encoder

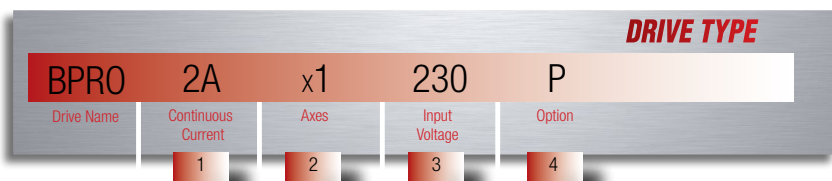
5 Brake

0 - Without brake
1 - With brake

6 Connection

D0 - 300mm cable length with AMP connectors (For TC40 only)
C2 - 90° M23 turnable connectors (For TC 60 - 80 - 100 only)

DRIVE TYPE



1 Continuous current models

2A
5A
10A

2 Available with single or double axes in the same box

x1 = single axis
x2 = double axes

3 Input voltage

230 VAC
400 VAC (not available for BPRO 2A)

4 Options selection

E = no options (encoder standard version)
P = pulse & direction
R = resolver
A = absolute encoder (available from February 2012)

TETRA COMPACT 40 RATINGS AND SPECIFICATIONS

TIME RATING	Continuous	AMBIENT TEMPERATURE	0 to 40 °C
INSULATION CLASS	F	AMBIENT HUMIDITY	20 to 80% (non-condensing)
ENCLOSURE	Totally enclosed. Self-cooled	POLES	8
PROTECTION CLASS	IP 65 standard on the body	THERMAL PROTECTION	Not available
INSULATION SYSTEM UL /CSA	cURus , DV155J File nr.:E216686	CE certified	

TC 40 0.16 32 TC 40 0.16 01 TC 40 0.32 01 TC 40 0.32 21

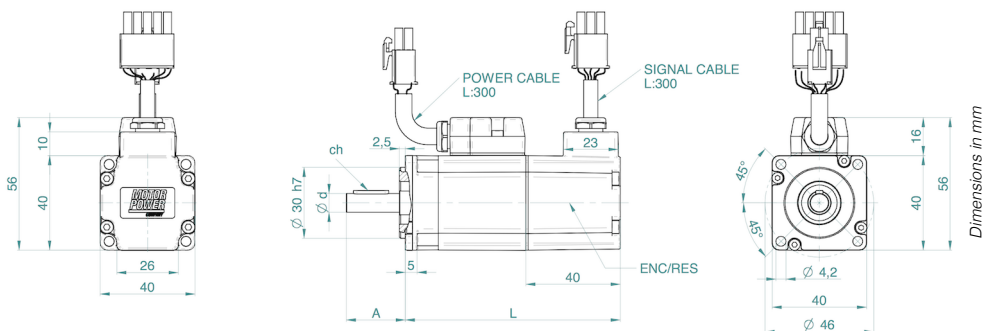
Stall Torque	Nm	0,21	0,21	0,34	0,34
Peak Torque	Nm	0,48	0,48	0,96	0,96
Nominal Torque	Nm	0,2	0,2	0,32	0,32
Rated Voltage		24 Vdc	48 Vdc	48 Vdc	230 Vac
Rated Output Power	W	60	60	100	100
Stall Current	Arms	4,200	2,340	3,160	0,642
Peak Current	Arms	10,50	5,60	11,20	2,00
Nominal Current	Arms	4,120	2,190	3,510	0,620
Rated Speed	rpm	3000	3000	3000	3000
Maximum Speed 24VDC	rpm	5000	3000	3000	-
Maximum Speed 48VDC	rpm	-	5000	5000	-
Maximum Speed 230VAC	rpm	-	-	-	5000
Torque Constant (± 5%)	Nm/Arms	0,050	0,094	0,094	0,526
Voltage Constant (± 5%)	Vrms/Krpm	3,000	5,700	5,700	31,800
Phase/phase resistance (± 5%)	Ohm	2,2	0,92	0,99	33,84
Phase/phase inductance	mH	2,5	0,7	3,4	0,6
Electrical time constant	ms	1,13	0,76	1,43	1,40
Thermal Resistance	°C/W	1,12	8,63	4,39	3,11
Mechanical time constant	ms	0,9	0,9	0,7	0,7
Rotor Inertia	Kg cm ²	0,027	0,027	0,047	0,047
Weight	Kg	0,4	0,4	0,54	0,54
Axial Load	N		180 (applied on the shaft's center)		
Radial Load	N		30 (applied on the shaft's center)		

Dimensions

L * (Without Brake)	mm	91	91	109	109
L * (With Brake)	mm	122	122	140	140
A	mm	25	25	25	25
d	mm	8 (h7)	8 (h7)	8 (h7)	8 (h7)
ch	mm	3x3x15	3x3x15	3x3x15	3x3x15

Rated output with 250 x 250 x 6 mm metallic heat sink flange coupling - Derating must be considered if the oil seal is applied - IP 42 standard shaft bushing

* Motor's length increases of 11mm with absolute encoder feedback

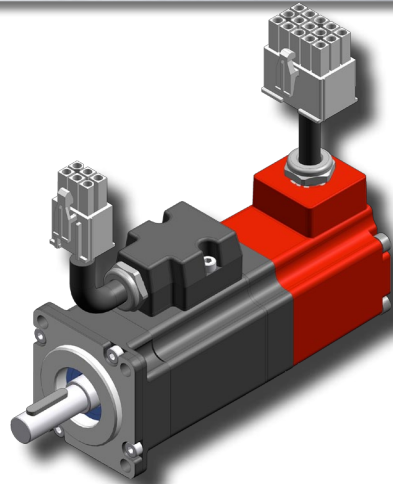


Power connector 6 PIN AMP 172168 - Signal connector 15 PIN AMP 172171

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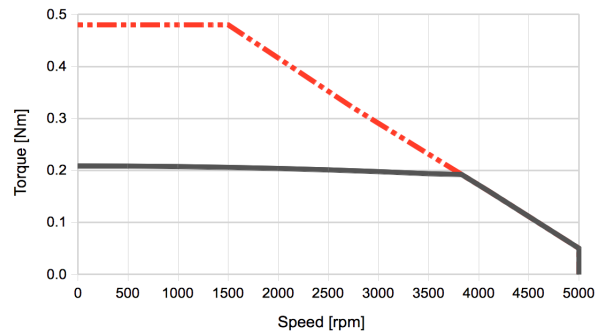
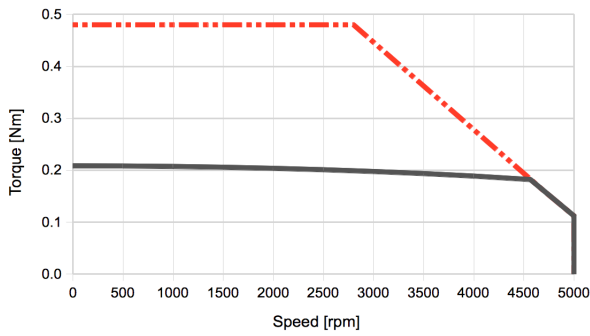
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TETRA COMPACT 40 TORQUE / SPEED CHARTS



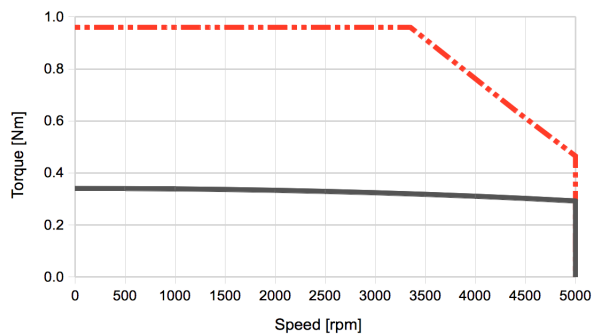
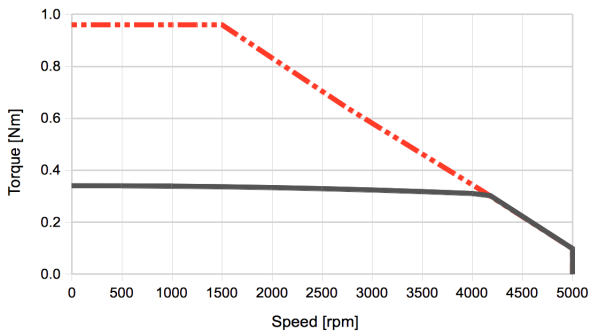
TETRA COMPACT 40 0.16 01

TETRA COMPACT 40 0.16 32



TETRA COMPACT 40 0.32 01

TETRA COMPACT 40 0.32 21



CONTINUOUS DUTY @ RATED VOLTAGE
 INTERMITTENT DUTY @ RATED VOLTAGE

TETRA COMPACT 60 RATINGS AND SPECIFICATIONS

TIME RATING	Continuous	AMBIENT TEMPERATURE	0 to 40 °C
INSULATION CLASS	F	AMBIENT HUMIDITY	20 to 80% (non-condensing)
ENCLOSURE	Totally enclosed. Self-cooled	POLES	8
PROTECTION CLASS	IP 65 standard on the body	THERMAL PROTECTION	KTY 84
INSULATION SYSTEM UL /CSA	cURus , DV155J File nr.:E216686	CE certified	

TC 60 0,65 21

TC 60 1,3 21

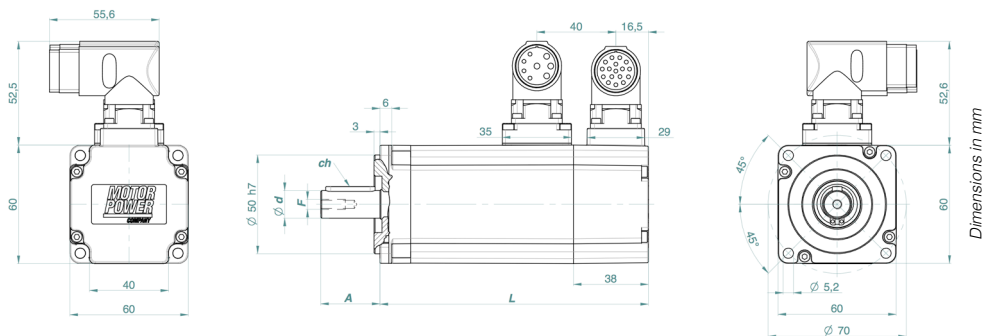
TC 60 1,3 15

Stall Torque	Nm	0,69	1,31	1,31
Peak Torque	Nm	1,95	3,90	3,90
Nominal Torque	Nm	0,64	1,17	1,17
Rated Voltage	Vac	230	230	400
Rated Output Power	W	200	370	370
Stall Current	Arms	1,302	2,472	1,440
Peak Current	Arms	4,10	8,15	4,70
Nominal Current	Arms	1,24	2,27	1,32
Rated Speed	rpm	3000	3000	3000
Maximum Speed 230VAC	rpm	5000	5000	-
Maximum Speed 400VAC	rpm	-	-	5000
Torque Constant (± 5%)	Nm/Arms	0,526	0,526	0,910
Voltage Constant (± 5%)	Vrms/Krpm	31,800	31,800	55,000
Phase/phase resistance (± 5%)	Ohm	10,6	4,38	13
Phase/phase inductance	mH	26,5	14,9	41,8
Electrical time constant	ms	2,5	3,39	3,2
Thermal Resistance	°C/W	10,01	7,25	2,44
Mechanical time constant	ms	0,94	0,54	0,54
Rotor Inertia	Kg cm ²	0,13	0,24	0,24
Weight	Kg	0,85	1,25	1,25
Axial Load	N	220 (applied on the shaft's center)		
Radial Load	N	70 (applied on the shaft's center)		

Dimensions

L (Without Brake)	mm	111	136	136
L (With Brake)	mm	148	173	173
A	mm	23	30	30
d	mm	11 (h6)	14 (h6)	14 (h6)
ch	mm	4x4x18	5x5x25	5x5x25
F		M4	M5	M5

Rated output with 250 x 250 x 6 mm metallic heat sink flange coupling - Derating must be considered if the oil seal is applied - IP 42 standard shaft bushing

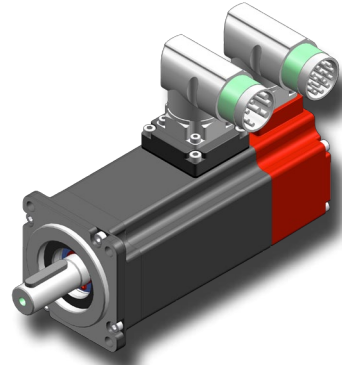


Signal connector 4+4 PIN M23 turnable BEDC 110 - Power connector 17 PIN M23 turnable AEDC 139

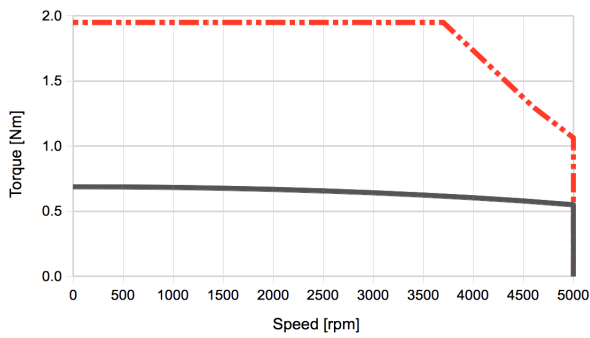
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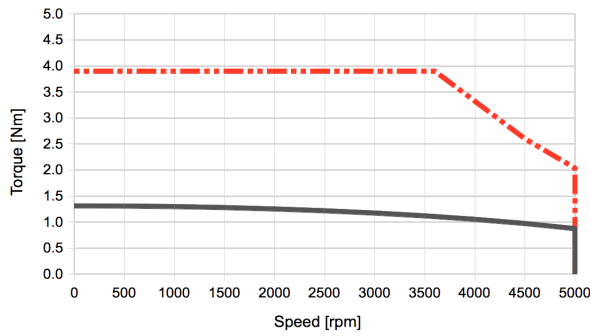
TETRA COMPACT 60 TORQUE /SPEED CHARTS



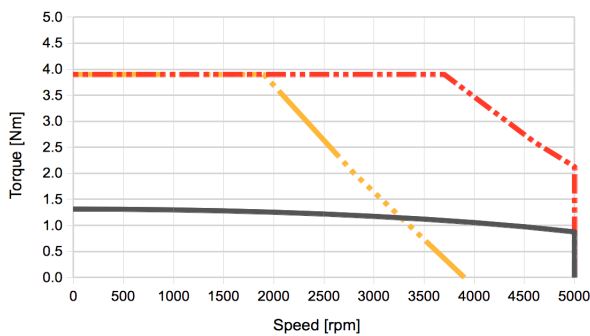
TETRA COMPACT 60 0.65 21



TETRA COMPACT 60 1.3 21



TETRA COMPACT 60 1.3 15



- CONTINUOUS DUTY @ RATED VOLTAGE
- INTERMITTENT DUTY @ RATED VOLTAGE
- INTERMITTENT DUTY @ 230 Vac

TETRA COMPACT 80 RATINGS AND SPECIFICATIONS

TIME RATING	Continuous	AMBIENT TEMPERATURE	0 to 40 °C
INSULATION CLASS	F	AMBIENT HUMIDITY	20 to 80% (non-condensing)
ENCLOSURE	Totally enclosed. Self-cooled	POLES	8
PROTECTION CLASS	IP 65 standard on the body	THERMAL PROTECTION	KTY84
INSULATION SYSTEM UL /CSA	cURus , DV155J File nr.:E216686	CE certified	

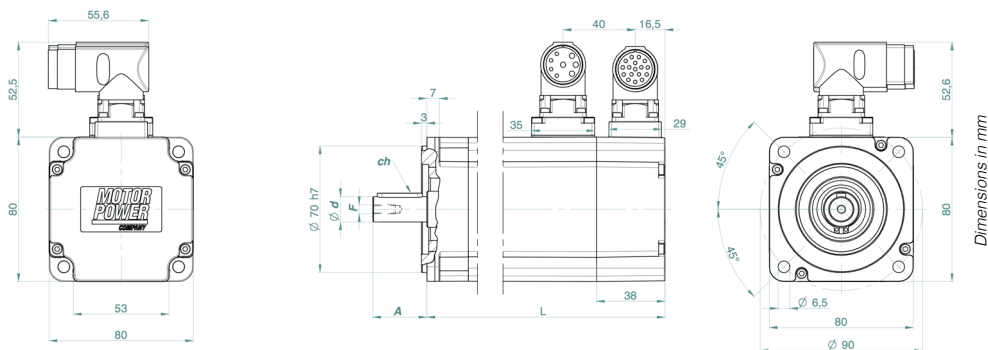
TC 80 1,5 21 TC 80 1,5 15 TC 80 2,8 21 TC 80 2,8 15

Stall Torque	Nm	1,74	1,74	2,96	2,96
Peak Torque	Nm	4,50	4,50	8,40	8,40
Nominal Torque	Nm	1,53	1,53	2,54	2,54
Rated Voltage	Vac	230	400	230	400
Rated Output Power	W	480	480	800	800
Stall Current	Arms	3,283	1,912	5,585	3,253
Peak Current	Arms	9,40	5,44	17,50	10,15
Nominal Current	Arms	2,97	1,73	4,94	2,87
Rated Speed	rpm	3.000	3.000	3.000	3.000
Maximum Speed 230VAC	rpm	5000	-	5000	-
Maximum Speed 400VAC	rpm	-	5000	-	5000
Torque Constant (± 5%)	Nm/Arms	0,526	0,910	0,526	0,910
Voltage Constant (± 5%)	Vrms/Krpm	31,800	55,000	31,800	55,000
Phase/phase resistance (± 5%)	Ohm	1,76	5,24	0,85	2,7
Phase/phase inductance	mH	7,9	23,65	3,82	11,46
Electrical time constant	ms	4,49	4,51	5,6	5,46
Thermal Resistance	°C/W	10,55	3,54	7,92	2,49
Mechanical time constant	ms	0,91	0,91	0,65	0,65
Rotor Inertia	Kg cm ²	0,64	0,64	1,16	1,16
Motor Weight	Kg	2,25	2,25	3,05	3,05
Axial Load	N	350 (applied on the shaft's center)			
Radial Load	N	110 (applied on the shaft's center)			

Dimensions

L (Without Brake)	mm	128	128	153	153
L (With Brake)	mm	170	170	195	195
A	mm	30	30	40	40
d	mm	14 (h6)	14 (h6)	19 (h6)	19 (h6)
ch	mm	5x5x25	5x5x25	6x6x30	6x6x30
F		M5	M5	M6	M6

Rated output with 250 x 250 x 6 mm metallic heat sink flange coupling - Derating must be considered if the oil seal is applied - IP 42 standard shaft bushing

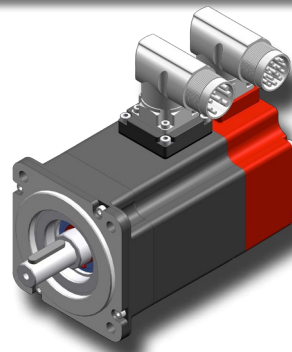


Signal connector 4+4 PIN M23 turnable BEDC 110 - Power connector 17 PIN M23 turnable AEDC 139

SEE IT BEFORE IT HAPPENS

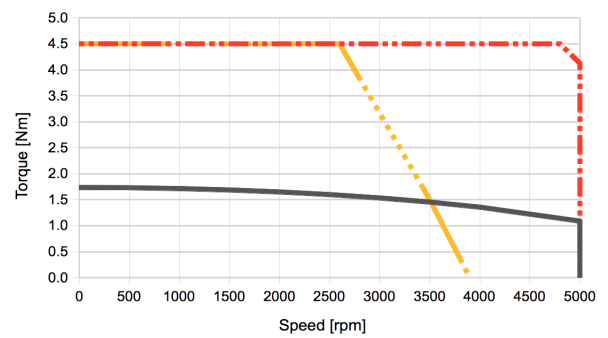
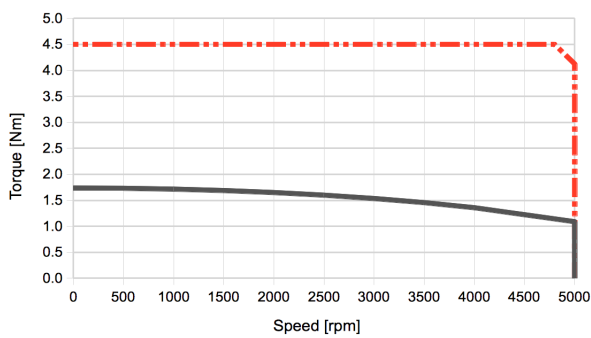


TETRA COMPACT 80 TORQUE /SPEED CHARTS



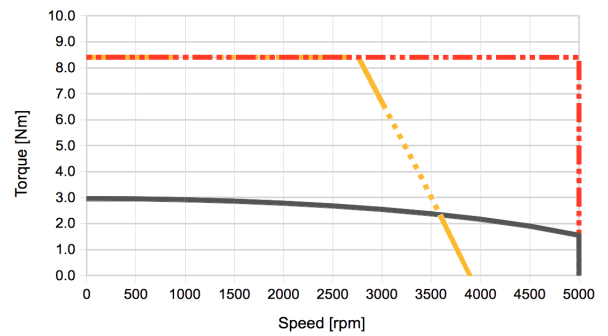
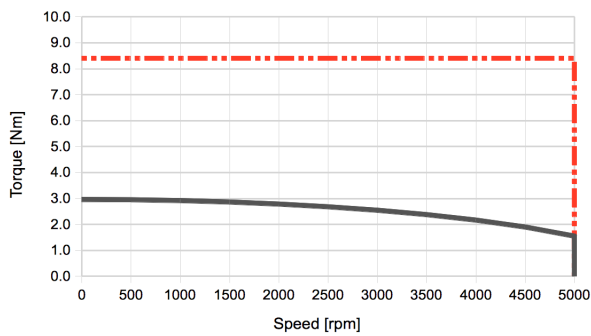
TETRA COMPACT 80 1.5 21

TETRA COMPACT 80 1.5 15



TETRA COMPACT 80 2.8 21

TETRA COMPACT 80 2.8 15



- CONTINUOUS DUTY @ RATED VOLTAGE
- - - INTERMITTENT DUTY @ RATED VOLTAGE
- · · INTERMITTENT DUTY @ 230 Vac

TETRA COMPACT 100 RATINGS AND SPECIFICATIONS

TIME RATING	Continuous	AMBIENT TEMPERATURE	0 to 40 °C
INSULATION CLASS	F	AMBIENT HUMIDITY	20 to 80% (non-condensing)
ENCLOSURE	Totally enclosed. Self-cooled	POLES	8
PROTECTION CLASS	IP 65 standard on the body	THERMAL PROTECTION	KTY84
INSULATION SYSTEM UL /CSA	cURus , DV155J File nr.:E216686	CE certified	

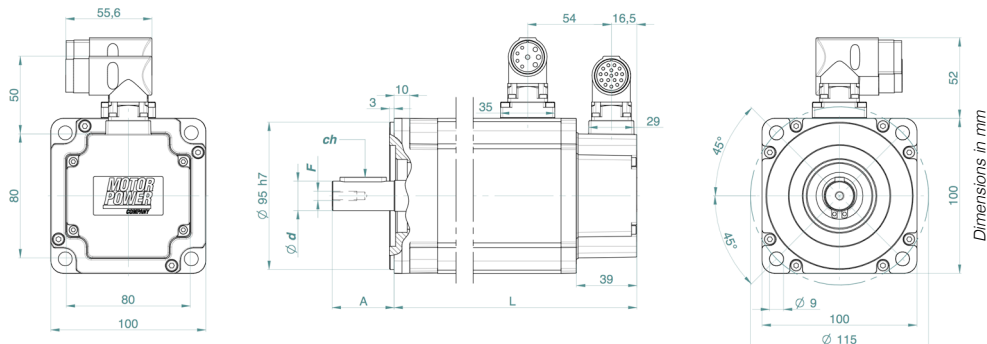
TC 100 3,2 21 TC 100 3,2 15 TC 100 5,6 15 TC 100 8 15

Stall Torque	Nm	3,2	3,2	5,6	8
Peak Torque	Nm	11,00	11,00	22,00	33,00
Nominal Torque	Nm	2,62	2,62	4,20	5,00
Rated Voltage	Vac	230	400	400	400
Rated Output Power	W	880	880	1320	1750
Stall Current	Arms	6,03	3,51	6,15	8,79
Peak Current	Arms	11,00	11,00	22,00	33,00
Nominal Current	Arms	5,09	2,96	4,75	5,66
Rated Speed	rpm	3000	3000	3000	3000
Maximum Speed 230VAC	rpm	5000	-	-	-
Maximum Speed 400VAC	rpm	-	5000	5000	5000
Torque Constant (± 5%)	Nm/Arms	0,526	0,910	0,526	0,910
Voltage Constant (± 5%)	Vrms/Krpm	31,800	55,000	31,800	55,000
Phase/phase resistance (± 5%)	Ohm	1,1	3,28	6,15	0,69
Phase/phase inductance	mH	4,44	13,28	6,33	4,22
Electrical time constant	ms	4,03	4,04	5,04	6,1
Thermal Resistance	°C/W	3,85	1,29	0,22	0,98
Mechanical time constant	ms	5,1	5,1	4,1	0,34
Rotor Inertia	Kg cm ²	1,55	1,55	2,91	4,1
Motor Weight	Kg	3,9	3,9	5,6	7,3
Axial Load	N	626 (applied on the shaft's center)			
Radial Load	N	225 (applied on the shaft's center)			

Dimensions

L (Without Brake)	mm	145	145	175	205
L (With Brake)	mm	195	195	225	255
A	mm	30	30	40	40
d	mm	19 (h6)	19 (h6)	19 (h6)	19 (h6)
C	mm	6x6x30	6x6x30	6x6x30	6x6x30
F		M6	M6	M6	M6

Rated Output with 250 x 250 x 6 mm metallic heat sink flange coupling - Derating must be considered if the oil seal is applied - IP 42 standard shaft bushing

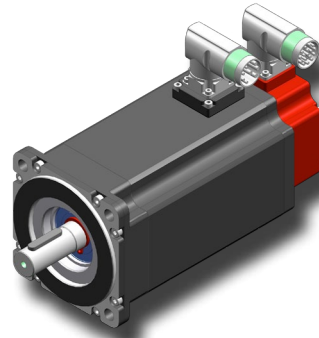


Signal connector 4+4 PIN M23 turnable BEDC 110 - Power connector 17 PIN M23 turnable AEDC 139

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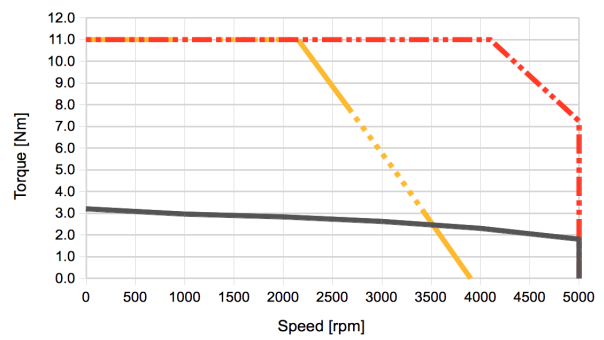
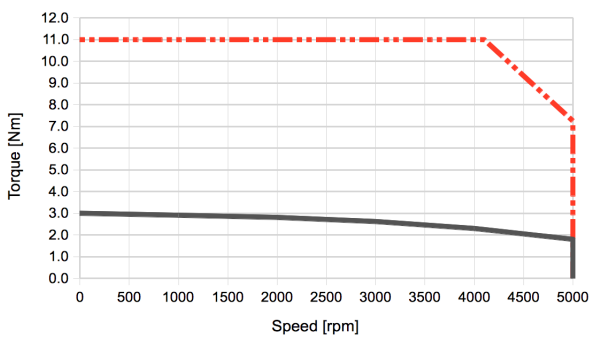
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TETRA COMPACT 100 TORQUE / SPEED CHARTS



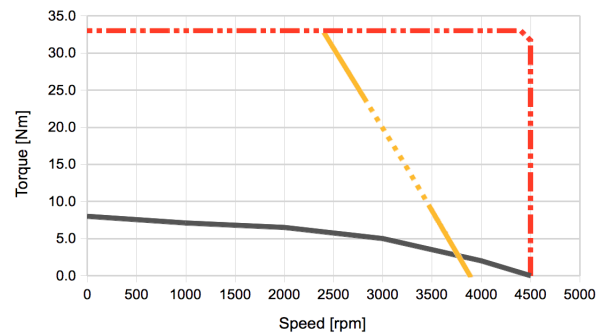
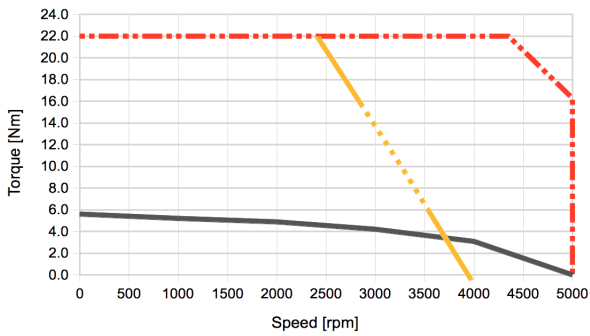
TETRA COMPACT 100 3.2 21

TETRA COMPACT 100 3.2 15



TETRA COMPACT 100 5.6 15

TETRA COMPACT 100 8 15



— CONTINUOUS DUTY @ RATED VOLTAGE
 - - - INTERMITTENT DUTY @ RATED VOLTAGE
 ····· INTERMITTENT DUTY @ 230 Vac

BRAKE FEATURES

		TC 40	TC 60	TC 80	TC 100
Static Torque	Nm	0,4	2	4,5	9
Moment of Inertia	Kg cm ²	0,008	0,050	0,220	0,800
Brake Weight	Kg	0,08	0,184	0,337	0,576
Rated Current	A	0,34	0,46	0,5	0,75
Input Power	W	8	11	12	18
Engaging Time	ms	6	6	7	7
Release Time	ms	10	25	35	40
Operating Voltage		24 Vdc +6% - 10% Stabilized			

FEEDBACK FEATURES

E1 TTL ENCODER

Motor size		TC 40 - 60 - 80 - 100
Nominal Voltage	Vrms	5±5%
Nominal current	mA	200
Max Frequency	Khz	200
Electronic type		LINE DRIVER AM 26 LS31
Zero impulse		ONE AT A LAP
N° of pulses revolution	ppr	2000
Resolution	cpr	8000
N° of commutation signal		3 DIFFERENTIAL
System accuracy		± 10'
Rotor inertia	Kg cm ²	0.01

FEEDBACK FEATURES

R1 RESOLVER 2p

Motor size		TC 40	TC 60 - 80 - 100
Nominal Voltage	Vrms	7±5%	7±5%
Nominal current	mA	18	
Phase shift		10°	0°
Minimum sin amplitude	mVrms	20	20
Frequency	Khz	10	10
Poles number		2	2
Trasformer ratio		0.5 ± 5%	0.5 ± 5%
Input impedance	ohm	160	70 + j100
Output impedance	ohm	130	175 + j275
System accuracy		± 10'	± 10'
Rotor inertia	Kg cm ²	0.006	0.03

A1 ABSOLUTE MULTITURN ENCODER

Motor size		TC 40 - 60 - 80 - 100
Nominal Voltage	V	7 ÷ 12
Nominal current	mA	60
Max frequency fon Sin Cos signal	Khz	65
Interface type		Hiperface
N° absolute singleturn positions		4096 (12 Bits)
N° absolute multiturn		4096 (12 Bits)
N° of pulses revolution		128
System accuracy		± 320"
Rotor inertia	Kg cm ²	0.0045

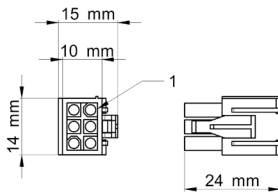
SEE IT BEFORE IT HAPPENS

WIRING MOTOR CONNECTIONS

POWER CONNECTOR TC 40

PIN	FUNCTION
1	Phase U
2	Phase V
3	Phase W
4	PE
5	Brake 24V (#)
6	Brake 0V (#)

(#) Optional



FEEDBACK CONNECTOR TC 40

E1 TTL ENCODER

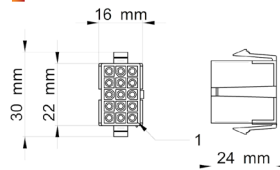
PIN	FEEDBACK FUNCTION
1	Ch A
2	Ch /A
3	Ch B
4	Ch /B
5	Ch Z
6	Ch /Z
7	Hall U
8	Hall /U
9	Hall V
10	Hall /V
11	Hall W
12	Hall /W
13	5 Vdc
14	0 Vdc
15	Shield

R1 RESOLVER

PIN	FEEDBACK FUNCTION
1	/Sin
2	Sin +
3	Cos
4	/Cos
5	/Ref
6	Ref
7	-
8	-
9	-
10	-
11	-
12	-
13	-
14	-
15	Shield

A1 ABSOLUTE ENCODER

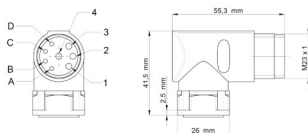
PIN	FEEDBACK FUNCTION
1	Sin
2	/Sin
3	Cos
4	/Cos
5	DATA
6	/DATA
7	-
8	-
9	-
10	-
11	-
12	-
13	7-12 Vdc
14	0 Vdc
15	Shield



POWER CONNECTOR TC 60 - 80 - 100

PIN	FUNCTION
1	Phase U
2	PE
3	Phase W
4	Phase V
A	Brake 24V (#)
B	Brake 0V (#)
C	KTY 84 (+)
D	KTY 84 (-)

(#) Optional



FEEDBACK CONNECTOR TC 60 - 80 - 100

TTL ENCODER E1

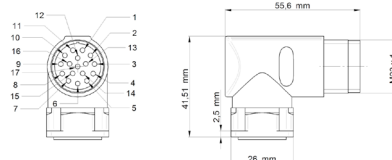
PIN	FEEDBACK FUNCTION
1	Hall W
2	Hall U
3	0 Vdc
4	5Vdc
5	Ch /A
6	Ch A
7	Ch /Z
8	Ch Z
9	Hall V
10	Shield
11	Ch /B
12	Ch B
13	Hall /W
14	Hall /V
15	Hall /U
16	-
17	-

RESOLVER R1

PIN	FEEDBACK FUNCTION
1	-
2	-
3	-
4	-
5	/Sin
6	Sin +
7	/Ref
8	Ref
9	-
10	Shield
11	Cos
12	/Cos
13	-
14	-
15	-
16	-
17	-

ABSOLUTE ENCODER A1

PIN	FEEDBACK FUNCTION
1	-
2	-
3	0 Vdc
4	7-12 Vdc
5	/Sin
6	Sin
7	/DATA
8	DATA
9	-
10	Shield
11	/Cos
12	Cos
13	-
14	-
15	-
16	-
17	-



SEE IT BEFORE IT HAPPENS

CABLES SPECIFICATIONS

POWER CABLES TC 40

SUB-D 15 PIN	COLOUR	FUNCTION	Power free wire cable for general purpose	For cable order	
1	Gray	Phase U		Lenght (mm)	Order code
2	Black	Phase V		3000	003108010620
3	Brown	Phase W		5000	003108010620
4	Yellow/Green + Shield	PE		10000	003108010624
5	Red	Brake +			
6	Black	Brake -			

SIGNAL CABLES TC 40

PIN	COLOUR	FUNCTION	Signal free wire cable for general purpose	For cable order	
1	Green	According to feedback		Lenght (mm)	Order code
2	Yellow			3000	003108010500
3	Violet			5000	003108010502
4	Black			10000	003108010504
5	Pink				
6	Gray				
7	Yellow/White				
8	Yellow/Brown				
9	White/Green				
10	Brown/Green				
11	Grey/Pink				
12	Red/Blu				
13	Brown				
14	White				
15	Shield (Black)				

PIN/AMP	COLOUR	PIN/SUB D15	TTL encoder signal SUB D cable for Basic Pro	For SUB D cable order	
1	Ch A	1		Lenght (mm)	Order code
2	Ch /A	5		3000	003108010500
3	Ch B	2		5000	003108010502
4	Ch /B	6		10000	003108010504
5	Ch Z	3			
6	Ch /Z	13			
7	Hall U	9			
8	Hall /U	10			
9	Hall V	14			
10	Hall /V	4			
11	Hall W	8			
12	Hall /W	15			
13	5 Vdc	7			
14	0 Vdc	11			
15	Shield	12			

CABLES SPECIFICATION

POWER CABLES TC 60 - 80 - 100

SUB-D 15 PIN	COLOUR	FUNCTION	Power free wire cable for general purpose		
1	Gray	Phase U		Lenght (mm)	Order code
2	Yellow/Green + Shield	PE		3000	003108010650
3	Brown	Phase W		5000	003108010652
4	Black	Phase V		10000	003108010654
A	Red	Brake +			
B	Black	Brake -			
C	White	KTY84+			
D	Blu	KTY84-			

SIGNAL CABLES TC 60 - 80 - 100

PIN	COLOUR	FUNCTION	Signal free wire cable for general purpose		For cable order
1	Gray/Pink	According to feedback		Lenght (mm)	Order code
2	Yellow/White			3000	003108010500
3	White			5000	003108010502
4	Brown			10000	003108010504
5	Yellow				
6	Green				
7	Grey				
8	Pink				
9	White/Green				
10	Shield – Wire				
11	Black				
12	Violet				
13	Red/Blue				
14	Brown/Green				
15	Yellow/Brown				
16	Red				
17	Blue				

PIN/AMP	COLOUR	PIN/SUB D15	Encoder TTI signal SUB D cable for Basic Pro		For cable order
1	Hall W	8		Lenght (mm)	Order code
2	Hall U	9		3000	003108010597
3	0 Vdc	11		5000	003108010595
4	5Vdc	7		10000	003108010593
5	Ch /A	5			
6	Ch A	1			
7	Ch /Z	13			
8	Ch Z	3			
9	Hall V	14			
10	Shield	12			
11	Ch /B	6			
12	Ch B	2			
13	Hall /W	15			
14	Hall /V	4			
15	Hall /U	10			
16	-	-			
17	-	-			

CONNECTOR SPECIFICATIONS

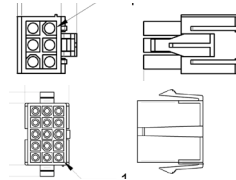
FLYING CONNECTORS AMP for TC 040

Power Connector
AMP 172160-1 + 6 PIN 171367-1

order code 007117000304

Signal connector
AMP 172163-1 + 15 PIN 171361-1

order code 007117000306



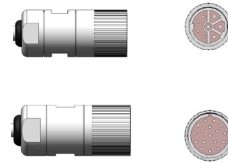
FLYING CONNECTORS M23 for TC 60 - 80 - 100

Power connector pin included

order code 007117000472

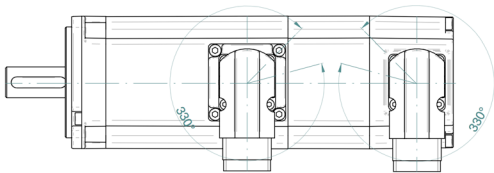
Signal connector pin included

order code 007117000462

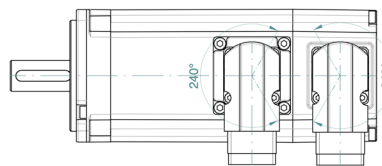


TURNING ANGLE SPECIFICATIONS

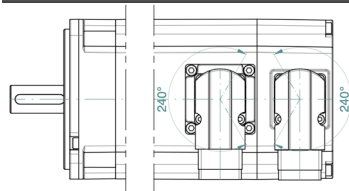
TETRA COMPACT 60



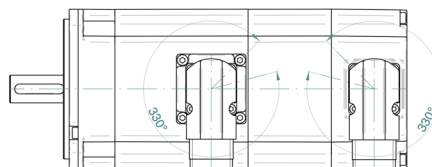
TETRA COMPACT 60 WITH BRAKE



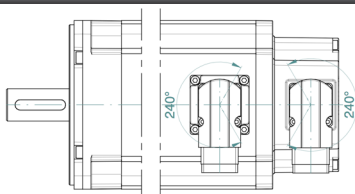
TETRA COMPACT 80



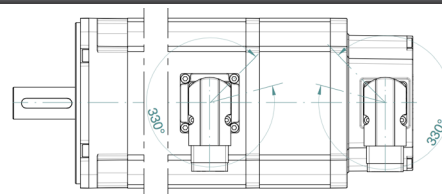
TETRA COMPACT 80 WITH BRAKE



TETRA COMPACT 100

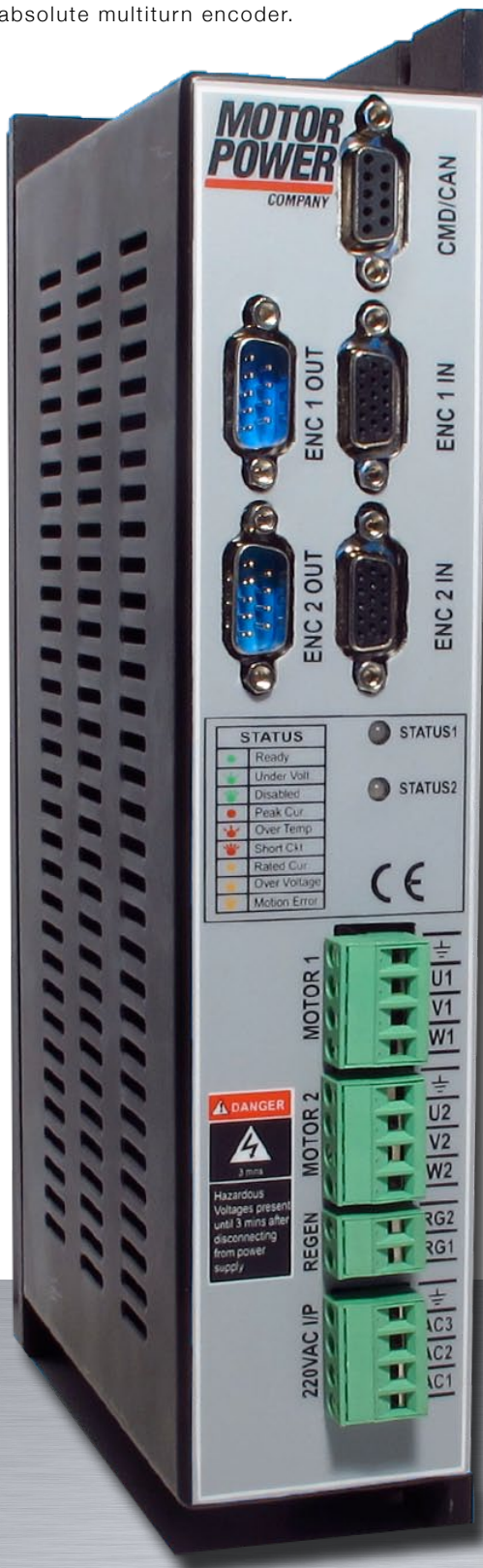


TETRA COMPACT 100 WITH BRAKE



SEE IT BEFORE IT HAPPENS

These drives are optimized to match with TETRA COMPACT brushless servomotors and operate as well direct drive linear and torque motors. In their essential features are the perfect drives for accessible applications; based on 230Vac and 380Vac power supply, the series offer considerable space and cost saving since are available in single and twin axes module in the same footprint. The drives integrates **Modbus and CANopen** communication protocols and manage TTL encoder, resolver and absolute multturn encoder.



DUAL AXES IN A BOX

Basic Pro is the effective solution to drive either 1 or 2 motors

FEATURE

- > **SERVO MODES: TORQUE, VELOCITY AND POSITION**
- > **±10 V ANALOG VELOCITY**
- > **TTL ENCODER STANDARD FEEDBACK**
- > **USER-FRIENDLY CONFIGURATION SOFTWARE**
- > **PULSE AND DIRECTION (5V)**
- > **GEARING ON DOUBLLE AXES**
- > **DUAL AXES CONFIGURATION ENSURES VERY COMPACT FRAME**

OPTIONAL

- > **ABSOLUTE ENCODER FEEDBACK**
- > **RESOLVER FEEDBACK**
- > **BRAKING RESISTOR**
- > **LINE FILTER**
- > **CABLES**

INTERFACE

- > **RS 232, CAN BUS (CANOPEN 301 AND 402), MODBUS**

SIMPLE AND COMPETITIVE

PRODUCT LIST

FEATURE	UNITS	BPRO 02x1 230	BPRO 05x1 230	BPRO 10x1 230	BPRO 05x1 380	BPRO 10x1 380
Input Voltage	VAC	110-230			230-380	
Efficiency at Rated Power	%	>95				
Auxiliary Supply Voltage	VDC	24 +/- 10%				
Continuous current	Arms	2	5	10	5	10
Peak Current	Arms	5	15	20	10	20
Digital Input		6				
Digital Output		4				
Analog Input		2				
Standard Feedback		TTL Encoder + Digital Hall Sensor				
Ambient operating Temperature	°C	0-40				
Max Humidity	%	90% Non condensing				
Vibration		0.6G 10-60 Hz				
Shock		1 G				
Communication		Rs-232, CAN Bus				
Dimensions	mm	52x260x132	52x260x132	68x390x198	68x390x198	68x390x198
Mounting Method		Wall Mount (on back or Side)				
Weight	Kg	1,5	1,5	2,2	2,2	2,4

**All the BASIC PRO model are available is single and dual version*



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MOTORS

MOTION CONTROL

MECHATRONICS

**MOTOR
POWER**
COMPANY

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