

# Series DRWB drives for the control of electric actuation

Drives for Brushless motors,  
sizes in power classes 100, 400, 750, 1000 W

SERIES DRWB DRIVES



- » Completely digital drives
- » PLC function programmable with the Camozzi QSet configuration software
- » Control of speed, position and torque (torque only for Series DRWB)
- » 64 positions programmable through the QSet
- » Self-compensation of errors

The Camozzi drives Series DRWB have been designed to control the movement of the Camozzi electromechanical actuators (Series 5E and Series 6E).

The servo drives DRWB, compact and especially optimized for the brushless Camozzi motors, are completely digital and available in the power classes 100, 400, 750, 1000 W. Equipped with vector mode and the function of Autotuning and containment of vibrations, they are made in such a way to easily perform replacements and to have a two-line alphanumeric display with 4 control keys on the servo drive.

A digital pulse interface allows control of the direction, position, speed and torque. It is possible to control the drives with analogic signals.

## GENERAL CHARACTERISTICS

Mod. DRWB-W01-2-D-E-A, DRWB-W04-2-D-E-A, DRWB-W07-2-D-E-A, DRWB-W10-2-D-E-A	
<b>Power</b>	100 W (Mod. DRWB-W01-2-D-E-A) 400 W (Mod. DRWB-W04-2-D-E-A) 750 W (Mod. DRWB-W07-2-D-E-A) 1000 W (Mod. DRWB-W10-2-D-E-A)
<b>Electrical supply</b>	200 ÷ 240 V AC (± 10%) single or three phase 50 ÷ 60 Hz (± 5%)
<b>Number of phases</b>	1
<b>Maximum current</b>	1.5 A (Mod. DRWB-W01-2-D-E-A) 4.1 A (Mod. DRWB-W04-2-D-E-A) 7.5 A (Mod. DRWB-W07-2-D-E-A, Mod. DRWB-W10-2-D-E-A)
<b>Logic supply</b>	200 ÷ 240 V AC (± 10 %) 50 ÷ 60 Hz (± 5 %) single phase
<b>Maximum logic current</b>	0.5 A max.
<b>OUTPUT CURRENT</b>	
<b>Continuous current (effective)</b>	0.9 A (Mod. DRWB-W01-2-D-E-A) 2.5 A (Mod. DRWB-W04-2-D-E-A) 5.1 A (Mod. DRWB-W07-2-D-E-A, Mod. DRWB-W10-2-D-E-A)
<b>Peak current (effective)</b>	2.7 A (Mod. DRWB-W01-2-D-E-A) 7.5 A (Mod. DRWB-W04-2-D-E-A) 15.3 A (Mod. DRWB-W07-2-D-E-A, Mod. DRWB-W10-2-D-E-A)
<b>Maximum duration of peak current</b>	1 second
<b>Type of control</b>	IGBT PWM vector control
<b>Controller sampling rate</b>	Current, speed and position: 15 kHz
<b>Motor types supported</b>	AC servo motors
<b>Status of LED</b>	Red: Error Green: Ready
<b>OPERATING MODES</b>	
<b>Encoder interface</b>	Operating voltage + 5 VDC ± 5 % @400 mA
<b>Communication interface</b>	USB 2.0
<b>Parameterisable I/O interface</b>	Digital Inputs [I1..I9], (single-end, optocoupler) Digital Outputs [O1..O4], (optocoupler) BRAKE Output [CN2_BRK], max. 1 A DC
<b>Feedback</b>	External transducer Activation threshold + HV > 370 V DC Activation threshold + HV < 360 V DC Tolerance ± 5 %
<b>Monitoring functions</b>	Short circuit, overvoltage (> 390 V DC ± 5 %), undervoltage (< 60 V DC); position error, encoder error, motor phase monitoring, overtemperature D2 (IGBT > 90 °C ± 1 °C), motor overtemperature
<b>Autotuning</b>	with automatic mass inertia calculation
<b>VSF (vibration suppression)</b>	01 Hz ÷ 200 Hz
<b>Other functions</b>	Friction compensation, gear play compensation
<b>Ambient conditions</b>	Operating temperature 0°C ÷ 40°C (above 55°C only with air conditioning)  Storage temperature -20°C ÷ 65°C  UAir humidity 20% ÷ 85% (non-condensing)  Operating altitude < 1000 m above sea level  Vibration 5.88 m/s (10 Hz ÷ 60 Hz)  Protection class IP20

**CODING EXAMPLE**

<b>DRWB</b>	<b>-</b>	<b>W01</b>	<b>-</b>	<b>2</b>	<b>-</b>	<b>D</b>	<b>-</b>	<b>E</b>	<b>-</b>	<b>A</b>
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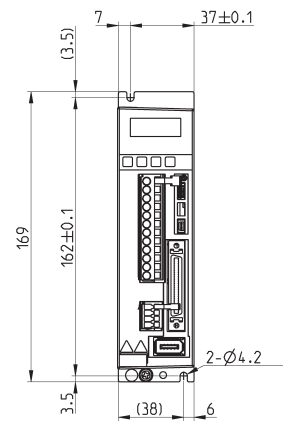
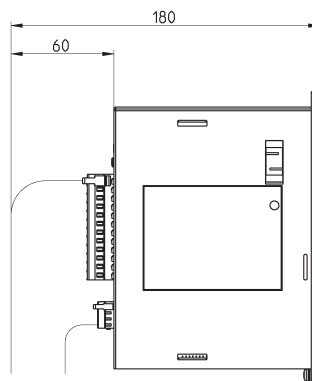
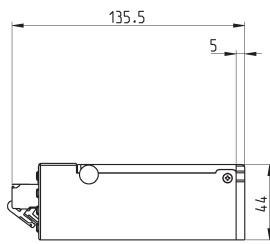
<b>DRWB</b>	SERIES
<b>W01</b>	SIZE W: W01 = 100 W W04 = 400 W W07 = 750 W W10 = 1000 W
<b>2</b>	SUPPLY: 2 = 220 V AC
<b>D</b>	COMMUNICATION: D = Digital I/O and Analog
<b>E</b>	FEEDBACK: E = incremental encoder 13 bit
<b>A</b>	VERSIONS: A = Standard

SERIES DRWB DRIVES

**Drive Mod. DRWB-W01-2-D-E-A**



Drive for the Camozzi Brushless motors

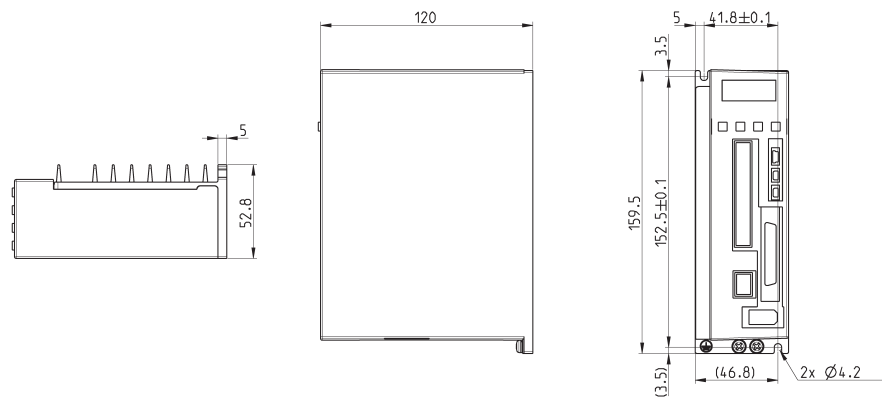


Mod.	Power	Supply	Encoder
DRWB-W01-2-D-E-A	100 W	230 V AC	13 bit

## Drive Mod. DRWB-W04-2-D-E-A



Drive for the Camozzi Brushless motors

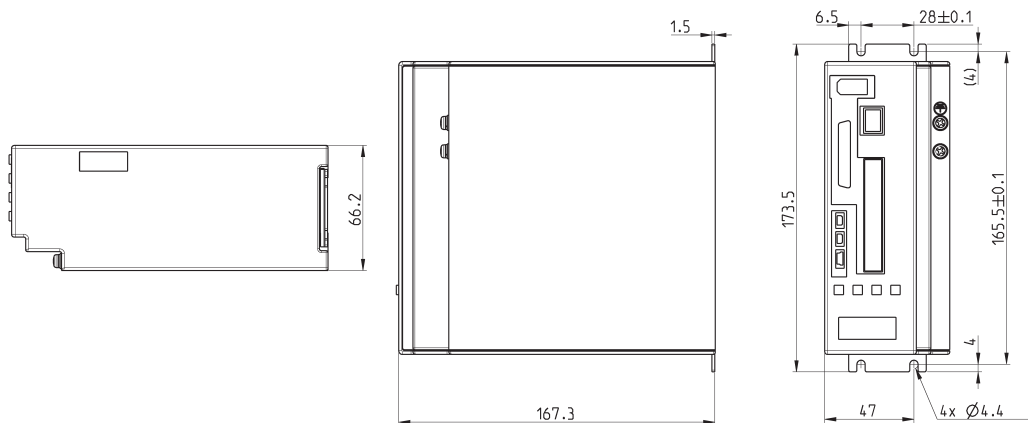


Mod.	Power	Supply	Encoder
DRWB-W04-2-D-E-A	400 W	230 VAC	13 bit

## Drives Mod. DRWB-W07-2-D-E-A and Mod. DRWB-W10-2-D-E-A

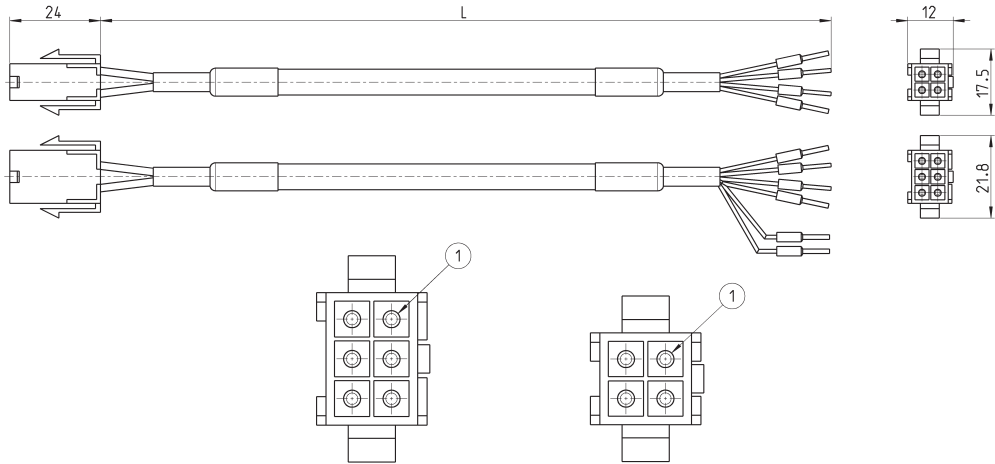


Drives for the Camozzi Brushless motors



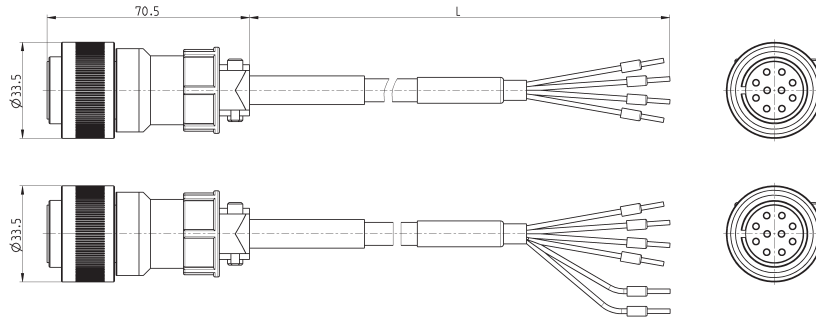
Mod.	Power	Supply	Encoder
DRWB-W07-2-D-E-A	750 W	230 VAC	13 bit
DRWB-W10-2-D-E-A	1000 W	230 VAC	13 bit

**Cables for Brushless (MTB) motors, 100-400-750 W**



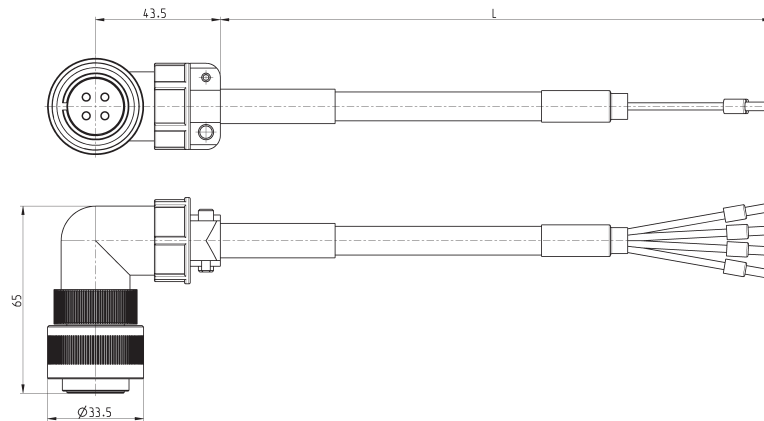
Mod.	Brake	Pins	L = cable (m)
EC-200421-B300	-	4	3
EC-200421-B500	-	4	5
EC-200421-BA00	-	4	10
EC-210621-B300	✘	6	3
EC-210621-B500	✘	6	5
EC-210621-BA00	✘	6	10

**Cables for Brushless (MTB) motors, 100-400-750 W IP65**



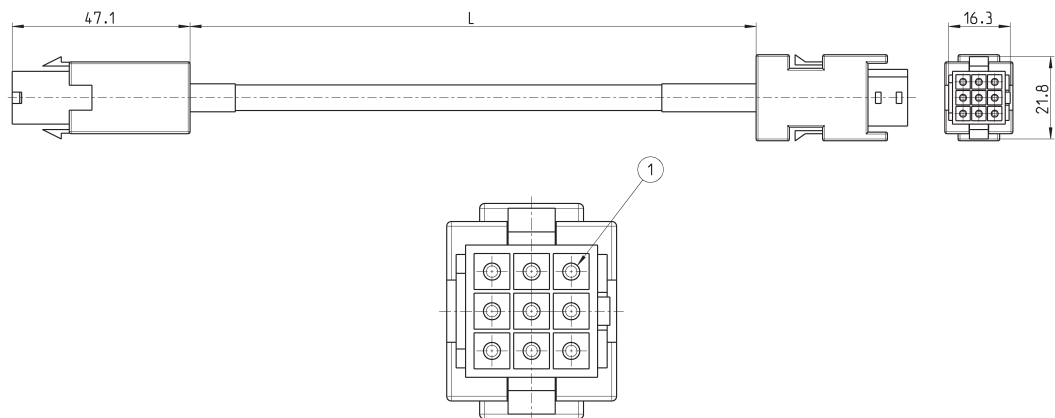
Mod.	Brake	Pins	L = cable (m)
EC-3004P1-B300	-	4	3
EC-3004P1-B500	-	4	5
EC-3004P1-BA00	-	4	10
EC-3106P1-B300	✘	6	3
EC-3106P1-B500	✘	6	5
EC-3106P1-BA00	✘	6	10

## Cables for Brushless (MTB) motor, 1000W IP65



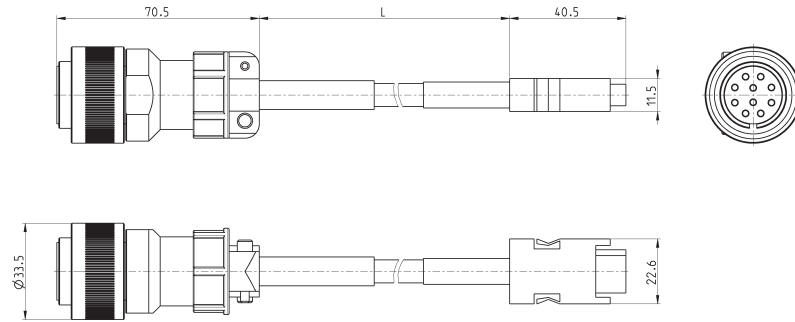
Mod.	Brake	Pins	L = cable (m)
EC-4704P1-B300	-	4	3
EC-4704P1-B500	-	4	5
EC-4704P1-BA00	-	4	10

## Encoder cables for Brushless (MTB) motors, 100-400-750 W



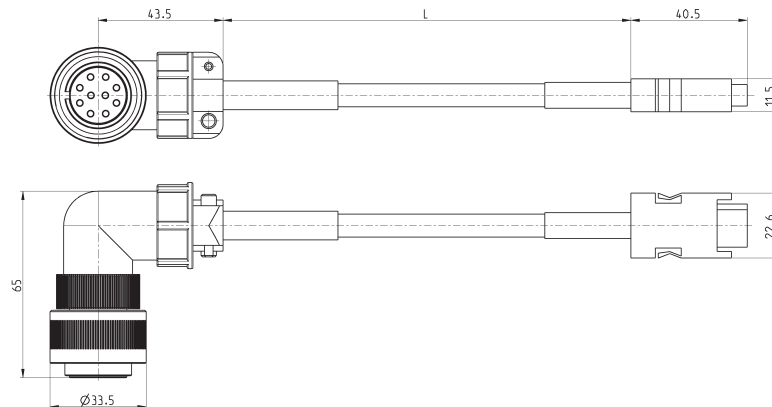
Mod.	Pins	L = cable (m)
EC-220923-B300	9	3
EC-220923-B500	9	5
EC-220923-BA00	9	10

**Encoder cables for Brushless (MTB) motors, 100-400-750 W IP65**



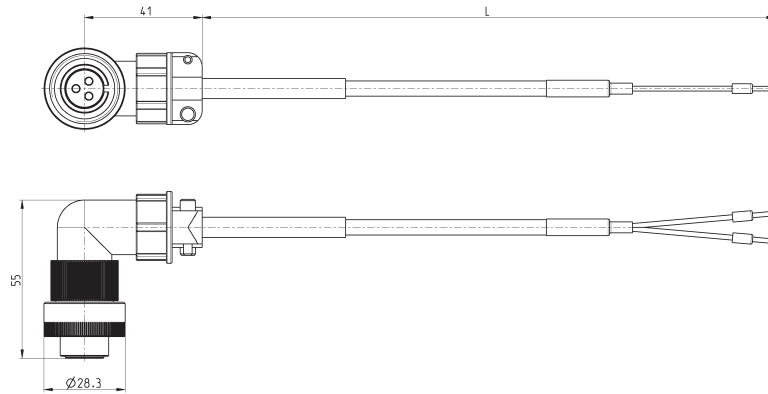
Mod.	Pins	L = cable (m)
EC-3209P3-B300	9	3
EC-3209P3-B500	9	5
EC-3209P3-BA00	9	10

**Encoder cables for Brushless (MTB) motor, 1000W IP65**



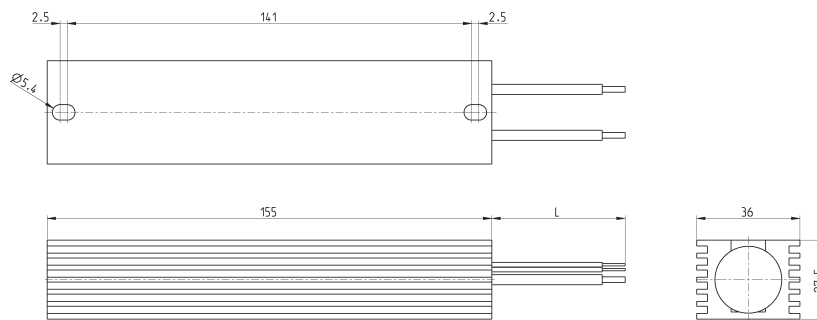
Mod.	Pins	L = cable (m)
EC-4809P3-B300	9	3
EC-4809P3-B500	9	5
EC-4809P3-BA00	9	10

**Brake cables for Brushless (MTB) motor, size 1000W IP65**



Mod.	Pins	L = cable (m)
EC-4902P1-B300	2	3
EC-4902P1-B500	2	5
EC-4902P1-BA00	2	10

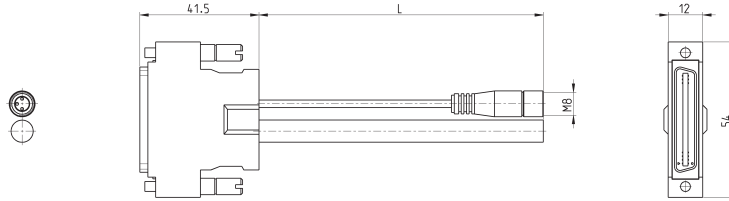
**Brake resistance for Brushless (MTB) motor**



Mod.	Power
EC-212022	300 W



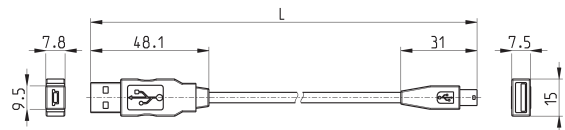
**Cables for DRWB drive I/O**



Mod.	Pins	L = cable (m)
G14W-1	50	1
G14W-3	50	3
G14W-5	50	5

**USB to Mini USB cable Mod. G11W-G13W-2**

For the hardware configuration of the Camozzi products



Mod.	description	connections	material for outer sheath	cable length "L" (m)
G11W-G13W-2	black shielded cable 28 AWG	standard USB to Mini USB	PVC	2