

Servo controllers and accessories



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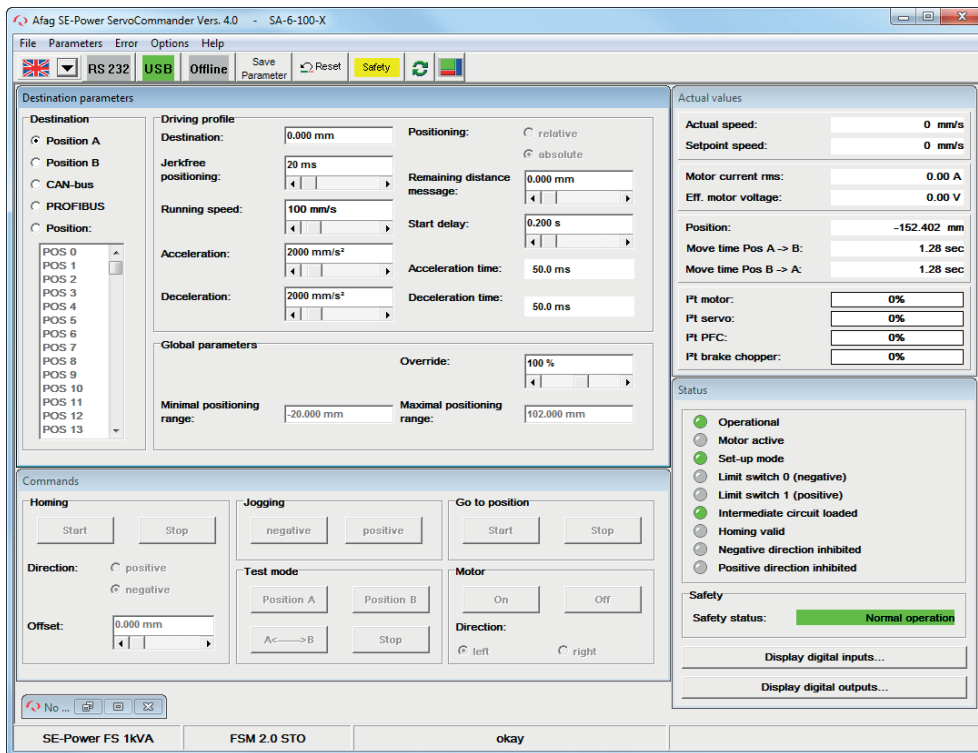
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Module	SE-Power 1kVA	SE-Power 3kVA	SE-Power 6kVA	C11xx	C12xx	C1251-2S	E12xx	E14xx	3-party control- lers
Catalogue HT linear									
ES12				Standard	Alternative		Alternative		Alternative
ES20				Standard	Alternative		Alternative		
ES20-2S						Standard			
ES30				Standard	Alternative		Alternative		
ES30-2S						Standard			
ES40/-HP				Standard	Alternative		Alternative		
ES40-2S						Standard			
SA-1/-FL	Standard						Alternative		Alternative
SA-3/-FL	Standard						Alternative		Alternative
SA-6/-FL	Standard						Alternative		Alternative
PEZ-52	Standard						Alternative		
PEZ-65	Standard						Alternative		Alternative
PEZ-80	Alternative	Standard					Alternative		
PEZ-100		Alternative	Standard				Alternative		Alternative
PDZ-128	Standard	Alternative		Alternative	Alternative		Alternative		
PDZ-160	Alternative	Standard	Alternative				Alternative		
PDZ-200		Alternative	Standard				Alternative		
PEL20/-SL				Standard	Alternative		Alternative		
PEL20/-SL/-2S						Standard			
PDL30				Standard	Alternative		Alternative		
PDL30-2S						Standard			
PDL40/-HP				Standard	Alternative		Alternative		
PDL40-2S						Standard			
Catalogue HT gripping & turning									
RE-50	Standard								Alternative
RE-50 18-100V				Standard	Alternative		Alternative		
RE-75	Standard								Alternative
RE-75 18-100V A				Standard	Alternative		Alternative		
SE30				Standard			Alternative		Alternative
RA-40				Standard			Alternative		Alternative
SG-50-ABq				Standard			Alternative		

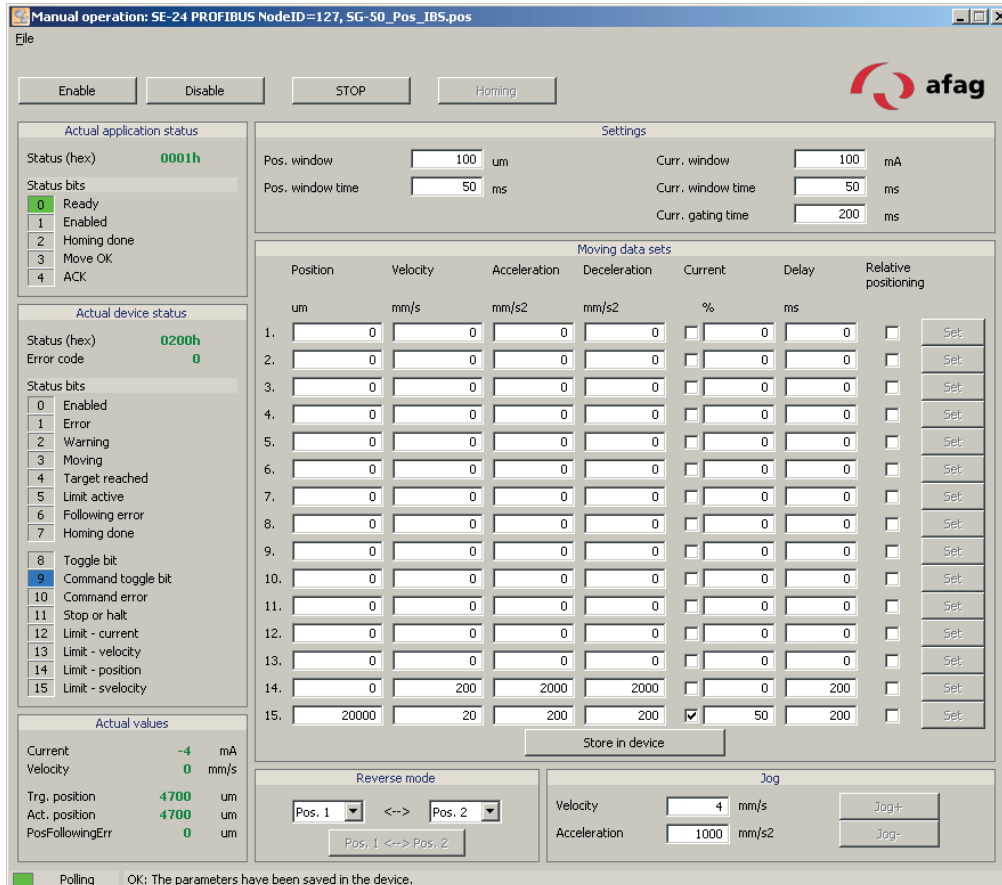
The servo controllers (except the third party controllers) are servo position controllers that are specifically tailored to all Afag modules and axes. They provide you, the user, with extremely short commissioning times and simple, practical handling. The effort required for system integration is reduced to a minimum because all modules and axes are parameterised ex works, and processed to ensure optimal operation.

Note: In order to be connected to third party controllers, all cables are also available with open ends. If you have any questions, please contact your sales partner.

- Standard
- Alternative



SE-COMMANDER
SE-Power
operating interface



AFAG-TOOLS SE-24
operating interface

Detailed information on the operating software can be found in the handbooks of the corresponding controllers.



SE-Power	
Operating temperature	0 - 40 °C
Bearing temperature	-25 - 70 °C
Humidity	< 90 %
Encoder evaluation	Resolver, incr., SinCos, Hiperface, en Dat

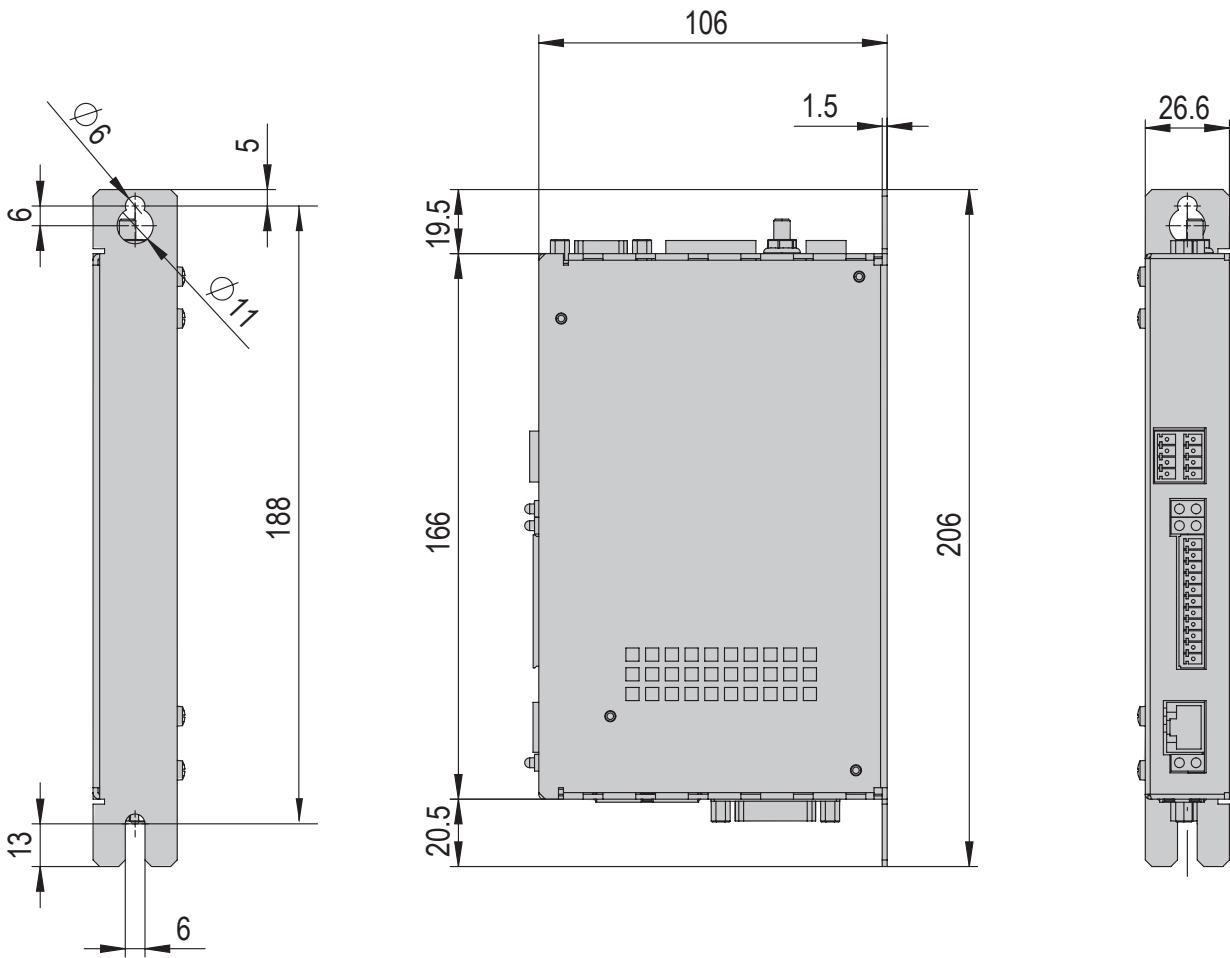
Type	SE-Power 1kVA	SE-Power 3kVA	SE-Power 6kVA
Order number	50036337	50162993	50183996
Net weight	2.1 kg	3.7 kg	3.7 kg
Dimensions W x H x D	54x201x200 mm	69x250x240 mm	69x250x240 mm
Nominal output current	5 A	5 A	10 A
Supply voltage	48 - 230 VAC	3 x 400 VAC	3 x 400 VAC
Voltage supply, alternative	60 - 380 VDC		
Control voltage	24 VDC	24 VDC	24 VDC
Protection type	IP 20	IP 20	IP 20
Intermediate circuit voltage	320 VDC	560 VDC	560 VDC
Output power	1 kVA	3 kVA	6 kVA
Analog	+/- 10 V	+/- 10 V	+/- 10 V
Number of position data records via Onboard I/Os	16	16	16
Programming interface	USB/RS 232	USB/RS 232	USB/RS 232
Standard interfaces for higher-level control	CANopen DSP 402	CANopen DSP 402	CANopen DSP 402
Optional interfaces for higher-level control	Profibus PROFINET EtherCAT	Profibus PROFINET EtherCAT	Profibus PROFINET EtherCAT
Safety functions	STO (Safe Torque Off)	STO (Safe Torque Off)	STO (Safe Torque Off)

Accessories

- Programming cable USB SE power FS
- Programming cable RS232 SE power
- Profibus Interface
- Profinet Interface
- EtherCAT Interface
- FS Safety Module FSM 2.0

Dimensions and dimension drawings

C11xx





C11xx	
Operating temperature	0 - 40 °C
Bearing temperature	-25 - 70 °C
Humidity	< 90 %

Type	C1100 CanOpen STO	C1150 EtherCat STO	C1150 Profinet PN STO
Order number	50419402	50419403	50419404
Net weight	0.7 kg	0.7 kg	0.7 kg
Dimensions W x H x D	26.6x206x106 mm	26.6x206x106 mm	26.6x206x106 mm
Max. power consumption	30 W	30 W	30 W
Nominal output current	25 A	25 A	25 A
Supply voltage	24 - 72 VDC	24 - 72 VDC	24 - 72VDC
Control voltage	24 VDC	24 VDC	24 VDC
Protection type	IP 20	IP 20	IP 20
Intermediate circuit voltage	24 - 80 VDC	24 - 80 VDC	24 - 80 VDC
Distance to controllers horizontal	20 mm	20 mm	20 mm
Distance to controllers vertical	50 mm	50 mm	50 mm
Programming interface	RS 232	RS 232	RS 232
Safety functions	STO (Safe Torque Off)	STO (Safe Torque Off)	STO (Safe Torque Off)
Standard interfaces for higher-level control	CANopen	EtherCAT	Profinet

Included in the delivery

- 1x Plug kit for C1xxx-1S

Accessories

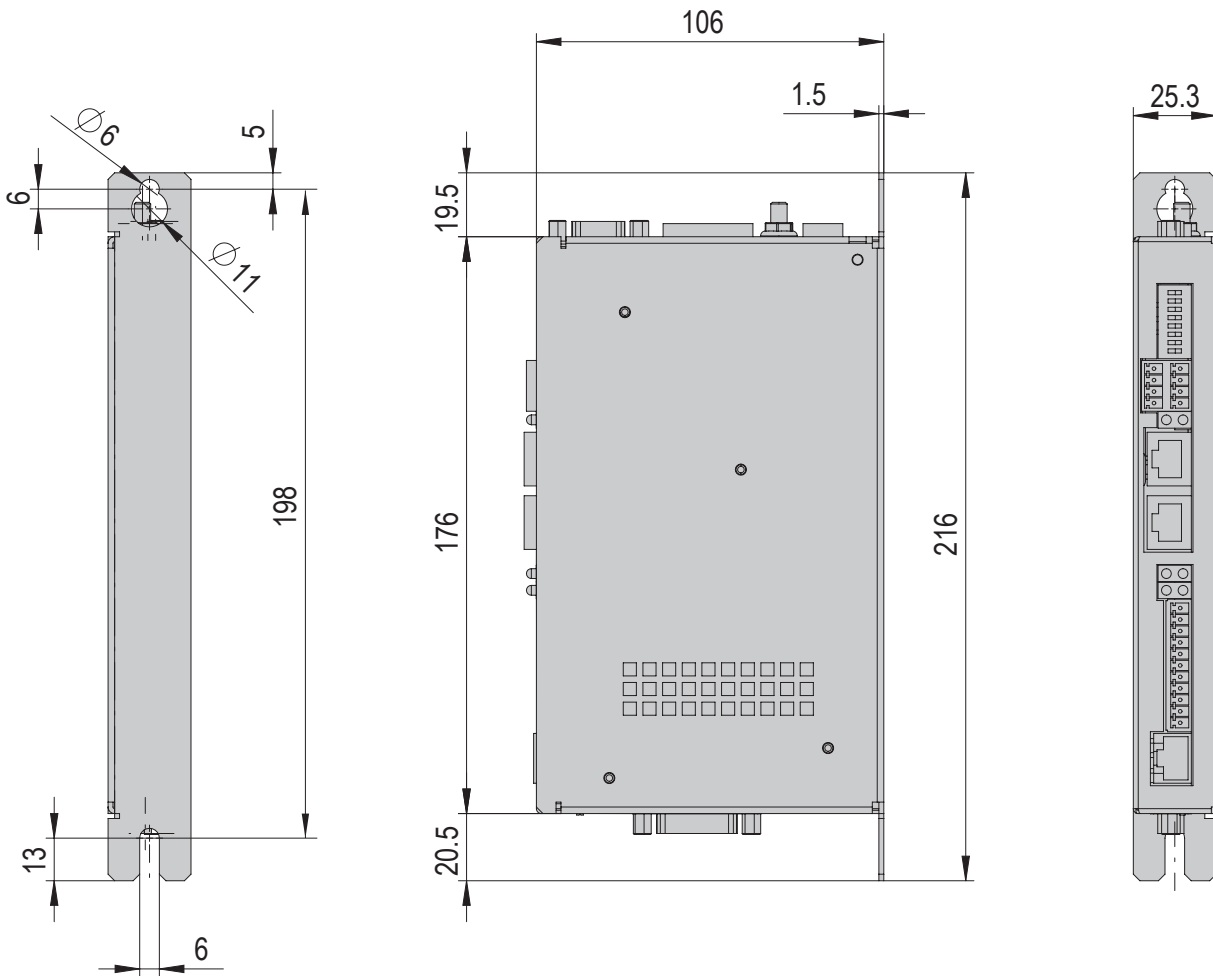
- Power supply S01-72/500, 1-phase
- Motor plug for controller C1x00
- USB-RS232 Converter for controllers

Alternative Accessories

- Additional power supplies

Dimensions and dimension drawings

C1250





C12xx	
Operating temperature	0 - 40 °C
Bearing temperature	-25 - 70 °C
Humidity	< 90 %

Type	C1250 EtherCat STO	C1250 Profinet PN STO	C1250 -MI-XC-1S STO
Order number	50419400	50419401	50581581
Net weight	0.7 kg	0.7 kg	0.7 kg
Dimensions W x H x D	25.3x216x106 mm	25.3x216x106 mm	25.3x216x106 mm
Max. power consumption	30 W	30 W	30 W
Nominal output current	25 A	25 A	25 A
Supply voltage	24 - 72 VDC	24 - 72 VDC	24 - 80 VDC
Control voltage	24 VDC	24 VDC	24 VDC
Protection type	IP 20	IP 20	IP 20
Intermediate circuit voltage	24 - 80 VDC	24 - 80 VDC	24 - 80 VDC
Distance to controllers horizontal	20 mm	20 mm	20 mm
Distance to controllers vertical	50 mm	50 mm	50 mm
Programming interface	RS 232	RS 232	RS 232
Safety functions	STO (Safe Torque Off)	STO (Safe Torque Off)	STO (Safe Torque Off)
Standard interfaces for higher-level control	EtherCat	Profinet	Multiinterface: PROFINET-PROFIdrive EtherCAT-DS402 POWERLINK SERCOS III ETHERNET IP-CIP Sync LinUDP CC-Link

Included in the delivery

- 1x Plug kit for C1xxx-1S

Accessories

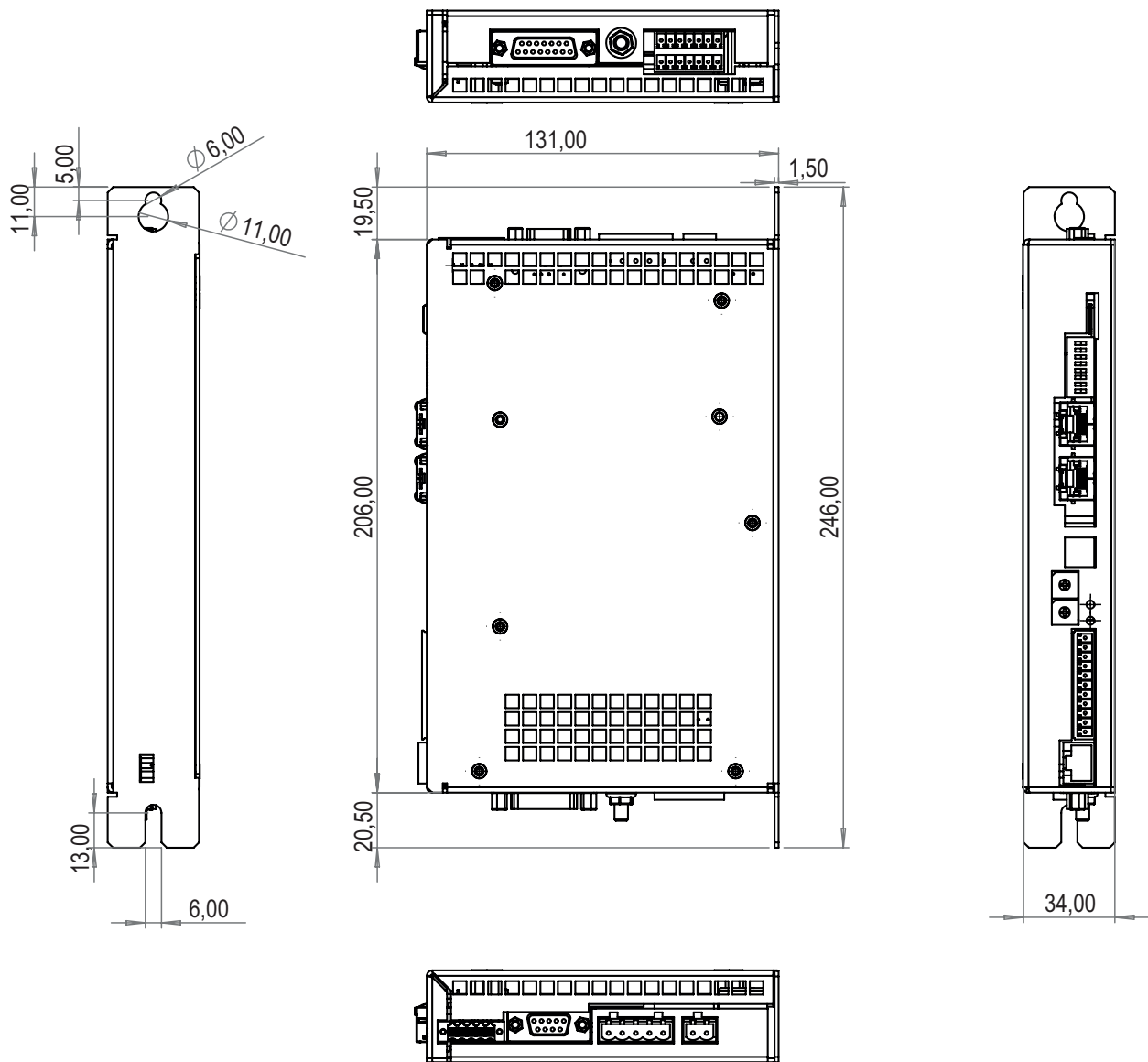
- Power supply S01-72/500, 1-phase
- Motor plug for controller C1x00
- USB-RS232 Converter for controllers

Alternative Accessories

- Additional power supplies

Dimensions and dimension drawings

C1251-2S





C12xx	
Operating temperature	0 - 40 °C
Bearing temperature	-25 - 70 °C
Humidity	< 90 %

Type	C1251 -MI-XC-2S-0E-000
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Order number	50597688
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Net weight	1.1 kg
Dimensions W x H x D	34x246x131 mm
Nominal output current	25 A
Max. power consumption	30 W
Supply voltage	24 - 72 VDC
Control voltage	22-26 VDC
Protection type	IP 20
Intermediate circuit voltage	24 - 80 VDC
Distance to controllers horizontal	20 mm
Distance to controllers vertical	50 mm
Programming interface	RS232 (RJ45)
Safety functions	STO (Safe Torque Off) SS1 (Safe Stop 1) SS2 (Safe Stop 2) SOS (Safe Operating Stop) SLS (Safe Limited Speed) SBC (Safe Brake Control) SBT (Safe Brake Test)
Standard interfaces for higher-level control	PROFINET PROFIdrive PROFIsafe EtherCAT-DS402-FSoE POWERLINK SERCOS III ETHERNET IP - CIP Sync LinUDP CC-Link

Accessories

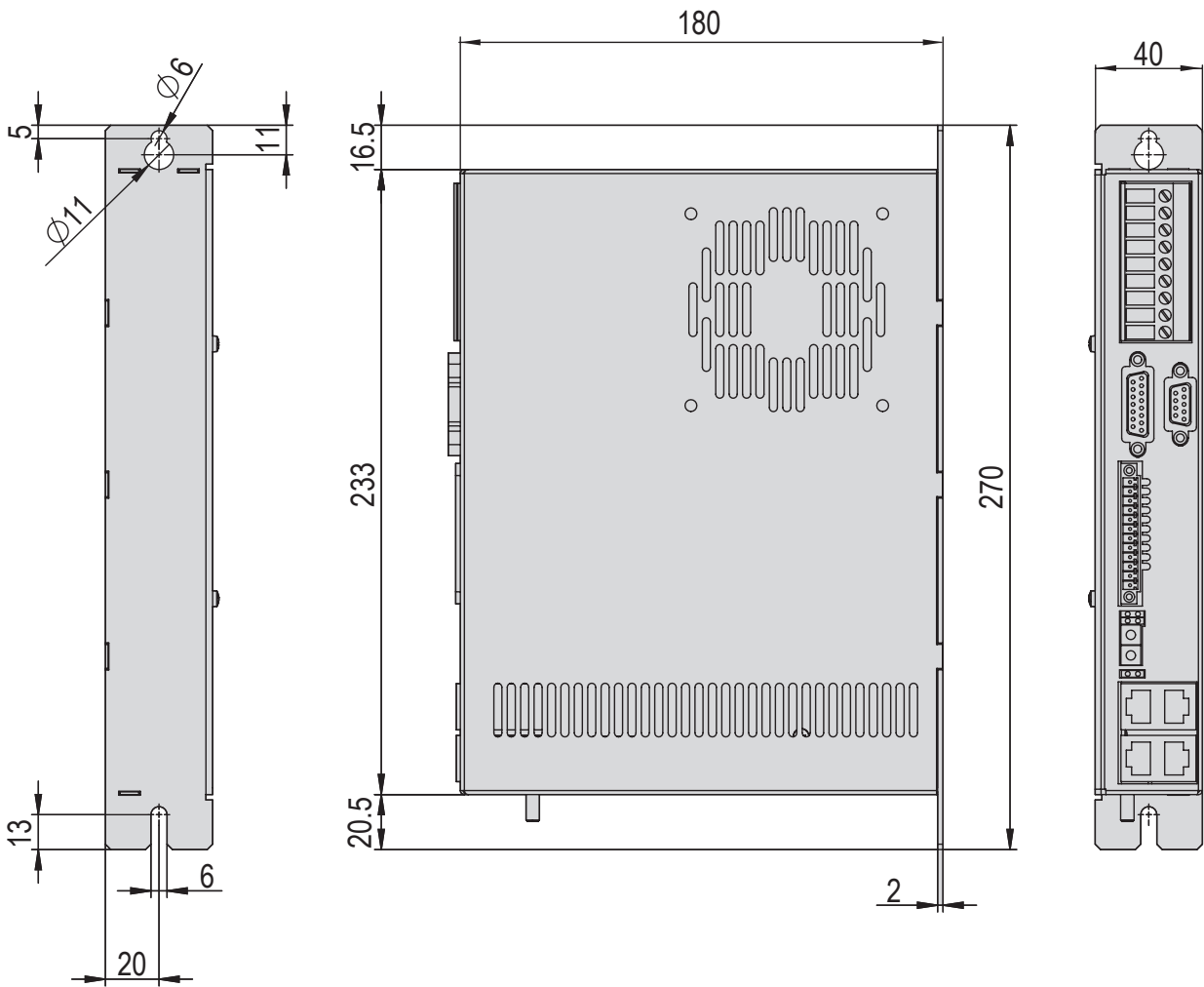
- 1x Plug kit for C1251-2S
- Power supply S01-72/500, 1-phase
- USB-RS232 Converter for controllers

Alternative Accessories

- Additional power supplies

Dimensions and dimension drawings

E12xx





E12xx	
Operating temperature	0 - 40 °C
Bearing temperature	-25 - 40 °C
Humidity	< 90 %

Type	E1250 Powerlink PL-UC	E1250 Ethernet IP-UC	E1250 Ethercat SoE SE-UC	E1250 Sercos III SC-UC
Order number	50465787	50465792	50465793	50465794
Net weight	1 kg	1 kg	1 kg	1 kg
Dimensions W x H x D	40x270x180 mm	40x270x180 mm	40x270x180 mm	40x270x180 mm
Nominal output current	32 A	32 A	32 A	32 A
Supply voltage	24 - 72 VDC	24 - 72 VDC	24 - 72 VDC	24 - 72 VDC
Control voltage	24 VDC	24 VDC	24 VDC	24 VDC
Protection type	IP 20	IP 20	IP 20	IP 20
Intermediate circuit voltage	max. 91 VDC	max. 91 VDC	max. 91 VDC	max. 91 VDC
Distance to controllers horizontal	20 mm	20 mm	20 mm	20 mm
Distance to controllers vertical	50 mm	50 mm	50 mm	50 mm
Programming interface	RS 232 + Ethernet	RS 232 + Ethernet	RS 232 + Ethernet	RS 232 + Ethernet
Standard interfaces for higher-level control	Powerlink	Ethernet/IP	EtherCAT SoE	Sercos III

Accessories

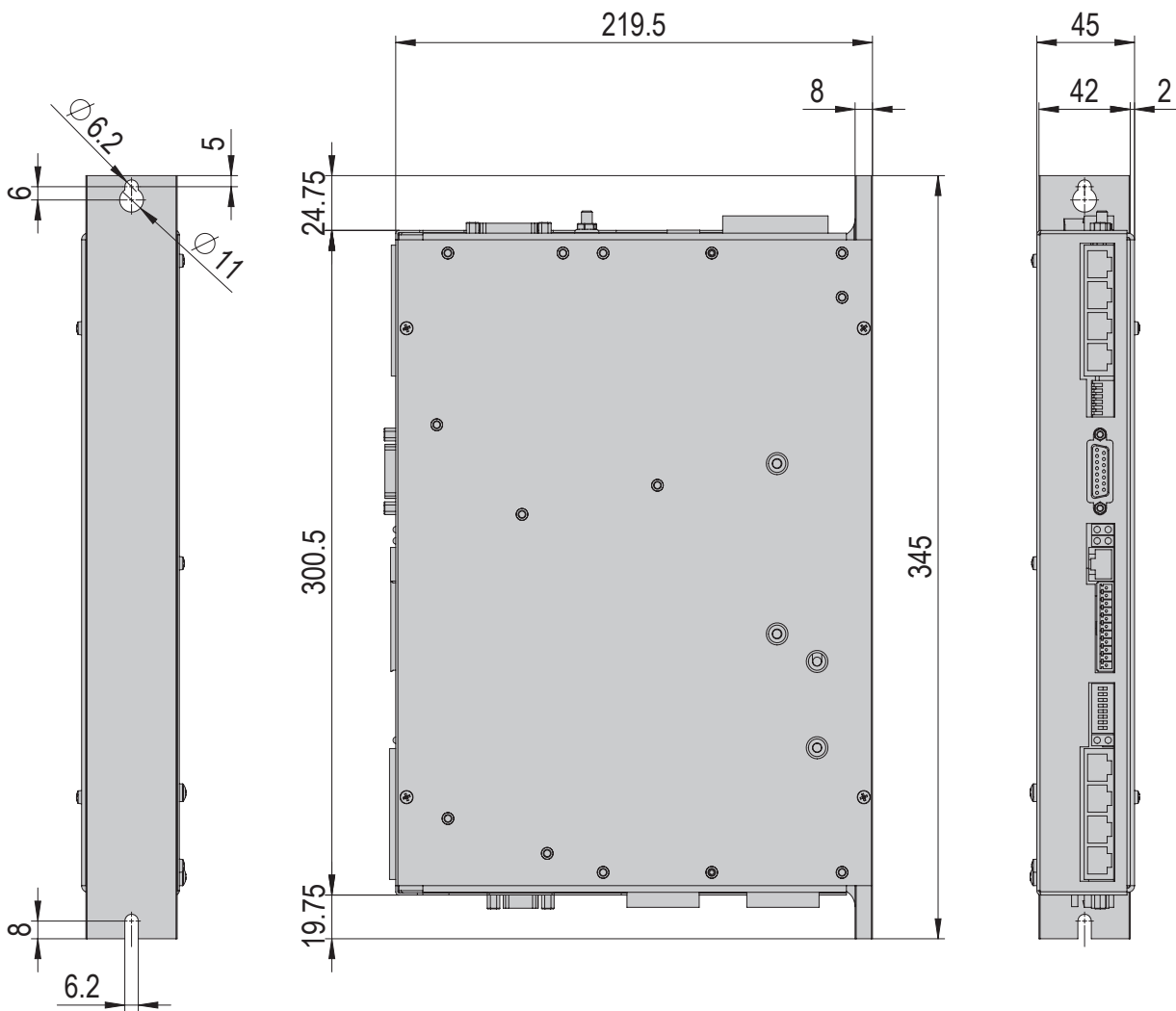
- Power supply S01-72/500, 1-phase
- USB-RS232 Converter for controllers

Alternative Accessories

- Additional power supplies

Dimensions and dimension drawings

E14xx





E14xx	
Operating temperature	0 - 40 °C
Bearing temperature	-25 - 70 °C
Humidity	< 90 %

Type	E1450 Ethercat EC STO	E1450 Profinet PN STO	Profidrive PD STO
Order number	50436475	50421487	50483034
Net weight	1.5 kg	1.5 kg	1.5 kg
Dimensions W x H x D	45x345x219,5 mm	45x345x219,5 mm	45x219.5x345 mm
Nominal output current	28 A	28 A	28 A
Supply voltage	400 VAC	400 VAC	400 VAC
Control voltage	24 VDC VDC	24 VDC VDC	24 VDC VDC
Protection type	IP 20	IP 20	IP 20
Intermediate circuit voltage	400 VAC	400 VAC	400 VAC
Distance to controllers horizontal	20 mm	20 mm	20 mm
Distance to controllers vertical	200 mm	200 mm	200 mm
Programming interface	RS 232	RS 232	RS 232
Standard interfaces for higher-level control	EtherCAT	PROFINET	PROFIdrive

Accessories

- Motor plug for controller E1400
- Plug kit for controller E1400-1S
- USB-RS232 Converter for controllers

Accessories Servo controllers

Programming cables

Programming cable RS232 SE-Power	
Order number	50038526
Net weight	0.2 kg
Cable Ø	4.8 mm
Material	PVC
Length	3 m

Accessories SE-Power

SE-Power EtherCAT Interface	
Order number	50038777
Net weight	0.15 kg

SE-Power Profibus Interface	
Order number	50036340
Net weight	0.1 kg

SE-Power FS Safety Module FSM 2.0 STO	
Order number	50393463
Net weight	0.075 kg

SE-Power Profinet Interface	
Order number	50445640
Net weight	0.15 kg

SE-Power FS Safety Module FSM 2.0 MOV	
Bestellnummer	50418506
Bruttogewicht	0.12 kg

Accessories Servo controllers

Accessories C 1xxx

Motor plug for controller C1xxx	
Order number	50426481
Net weight	0.01 kg

Plug kit for controller C1xxx-1S	
Order number	50426471
Net weight	0.02 kg

Plug kit for controller C1251 2S	
Bestellnummer	50597689
Nettogewicht	0.02 kg

Plug X3 for controller C1xxx	
Order number	50530603
Net weight	0.02 kg

Plug X49 for controller C1251 2S	
Bestellnummer	50597690
Nettogewicht	0.02 kg

Plug X50 for controller C1251 2S	
Bestellnummer	50597691
Nettogewicht	0.02 kg

Accessories E14xx

Motor plug for controller E1400	
Order number	50426480
Net weight	0.03 kg

Plug kit for controller E1400-1S	
Order number	50426476
Net weight	0.05 kg

Brake resistor 100W for controller E14xx	
Bestellnummer	50474517
Nettogewicht	0.05 kg

USB-RS232 Converter for controllers	
Order number	50426494
Net weight	0.07 kg

Transformers

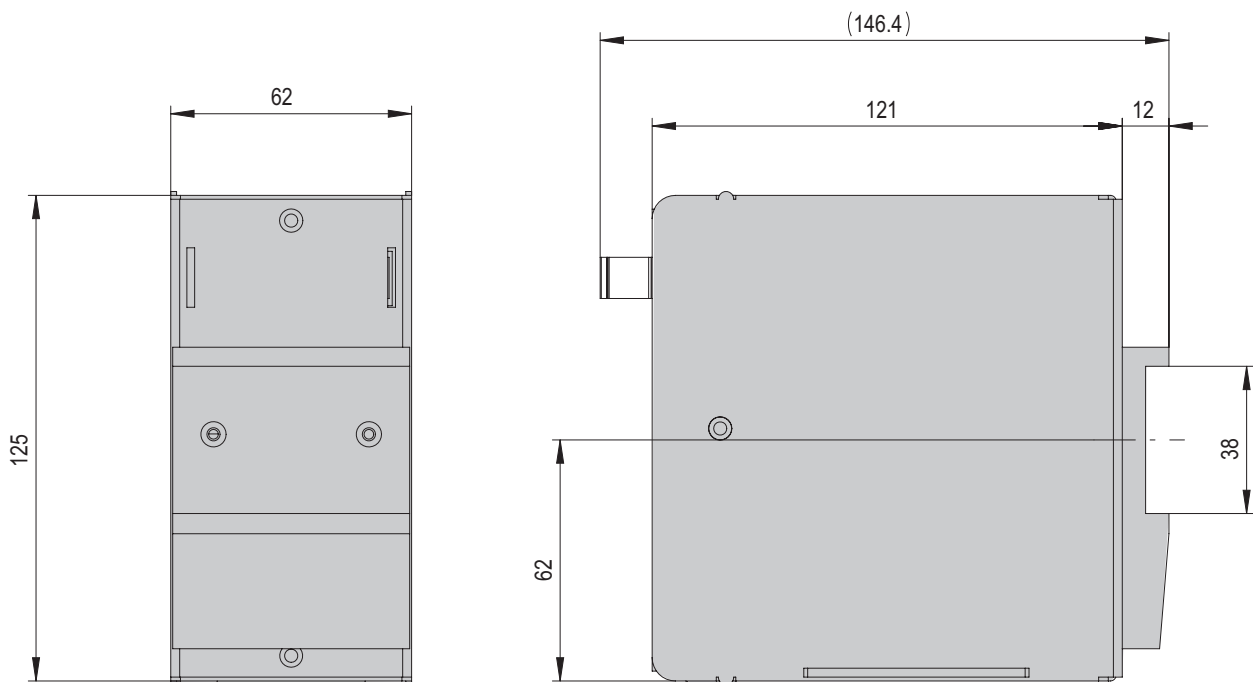
Power supply S01-72/500, 1 phase

Operating temperature -25 - 70 °C

Type Power supply S01-72/500, 1-phase

Order number **50439465**

Net weight	1 kg
Protection rating	IP 20
Output power	480 W
Primary voltage	90 - 132 VAC, 50/60 Hz oder 180 - 264 VAC, 50/60 Hz
Secondary voltage	54 - 80 VDC adjustable
Nominal output current	10 A
External fuse	6 A (C, D, K Typ)
Distance to controllers horizontal	10 mm
Distance to controllers vertical	20 mm



Transformers

Power supply S01-72/1000, 3 phase

Operating temperature -25 - 70 °C

Type Power supply S01-72/1000, 3-phase

Order number 50439466

Net weight 2 kg

Protection rating IP 20

Output power 960 W

Primary voltage 3x 340 - 550 VAC, 50/60 Hz

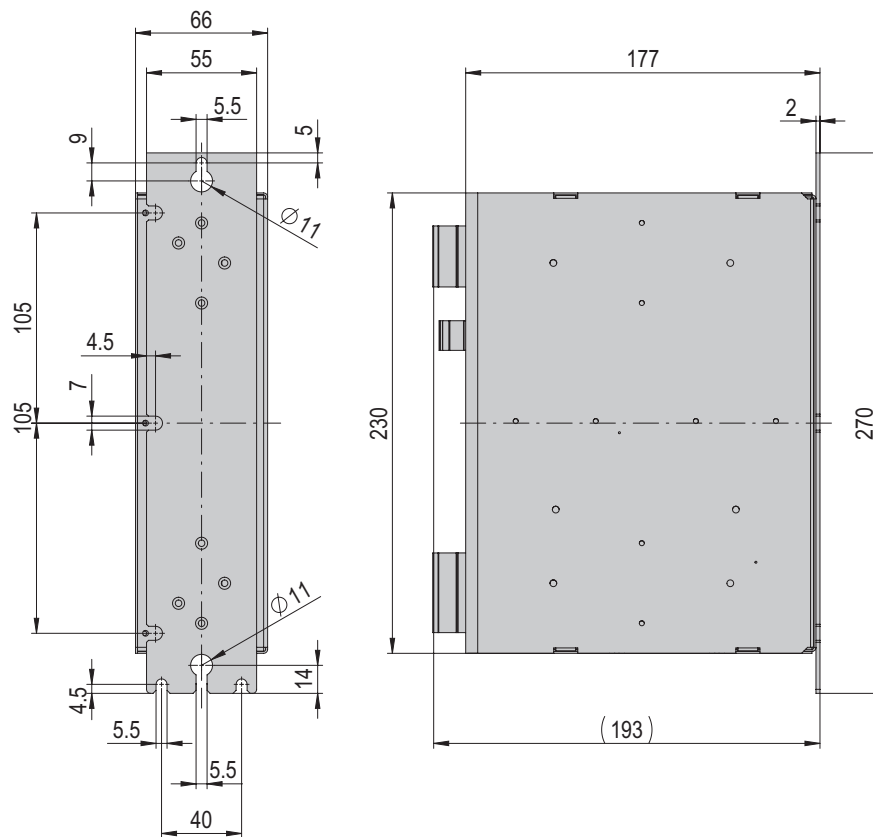
Secondary voltage 54 - 80 VDC adjustable

Nominal output current 27 A

External fuse 16-32 A (C, D, K Typ)

Distance to controllers horizontal 10 mm

Distance to controllers vertical 50 mm



Transformers

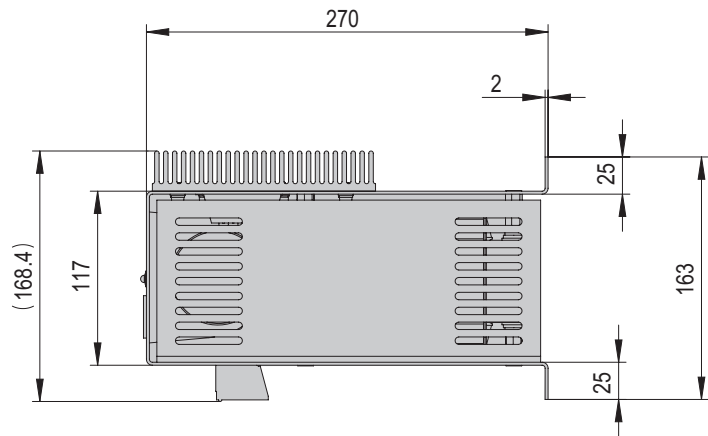
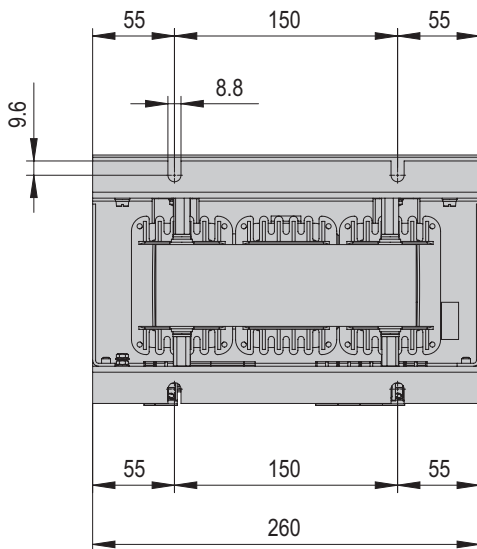
Power supply T01-72/1500 multi, 3-phases

Operating temperature 0 - 40 °C

Type Power supply T01-72/1500 Multi, 3-phase

Order number 50438369

Net weight	17 kg
Output power	IP 20
Protection rating	1500 W
Primary voltage	3x 230/400/480 VAC, 50/60 Hz
Secondary voltage	72 VDC
Nominal output current	50 A
External fuse	8 A (C, D, K Typ)
Distance to controllers horizontal	20 mm
Distance to controllers vertical	20 mm





Programming cable SE-Power, 3 m



SE-Power

	M	G	R
SA-1	M10	G6	R8
SA-3	M10	G6	R1
SA-6	M5	G5	R1
RE-50/RE-75	M12	G10	R1
PEZ/PDZ	M5	G5	R1



USB-RS232
converter
for Linmot
controller



C11xx & C12xx

	M			G	R	Motor connector	Plug X3	Adapter
	...-X	...-1	...-2	...-1	...-1			
ES12	M16	M16	M16					50455642
ES20	M16	M16	M16					
ES30	M23	M17						
ES40	M23	M17						
SA-1		M10		G14	R8	50426481	50530603	
SA-3		M10		G14	R1	50426481	50530603	
SA-6		M18		G16	R1	50426481	50530603	
PEZ-52		M18		G16	R1	50426481	50530603	
PEZ-65		M18		G16	R1	50426481	50530603	
PDZ-128		M18		G16	R1	50426481	50530603	
PEL20	M16	M16	M16					
PDL30	M23	M17						
PDL40	M23	M17						
RE-50 18-100V		M12		G14	R1	50426481		
RE-75 18-100V A		M27		G14	R1	50426481		
RA-40	M16	M16	M16					
SE30	M23	M17						
SG-50-Abq		M19				50426481		



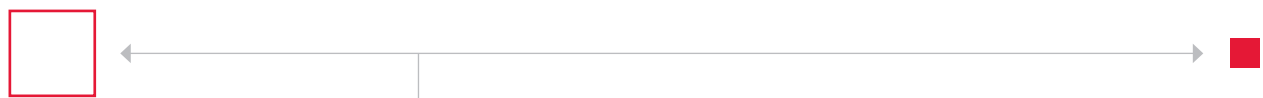
USB-RS232
converter for
Linmot controller



E12xx

	M			G	R	Adapter
	...-X	...-1	...-2	...-1	...-1	
ES12	M20	M20				50455642
ES20	M20	M20				
ES30	M24	M22	M22			
ES40	M24	M22	M22			
SA-1		M10		G14	R8	
SA-3		M10		G14	R1	
SA-6		M18		G16	R1	
PEZ-52		M18		G16	R1	
PEZ-65		M18		G16	R1	
PDZ-128		M18		G16	R1	
PEL20	M20	M20				
PDL30	M24	M22	M22			
PDL40	M24	M22	M22			
RE-50 18-100V		M12		G14	R1	
RE-75 18-100V A		M27		G14	R1	
RA-40	M20	M20				
SE30	M24	M22	M22			

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USB-RS232
converter for
Linmot controller



E14xx

	M			G	R	Motor connector	Brake connector
	...-X	...-1	...-2	...-1	...-1		
PEZ/PDZ		M18		G16	R1	50426480	50474519*

* Only required for motor with brake