



# CD 180<sup>®</sup>

## DC SERVODRIVE



### CD 180<sup>®</sup>

Stand alone, four quadrant bidirectional servodrives for controlling DC servomotors up to 30 Nm (4285,6 oz-in).

Typical applications are: Axis translation, packaging equipment, storage system lathes, welding robots and machining centers.

#### STANDARD FEATURES

- ✓ Internal power supply and dumping circuit
- ✓ Ventilation on board when required
- ✓ Power block transistor bridge
- ✓ Power stage and optocoupled enable inputs
- ✓ Dynamic braking for blackout conditions
- ✓ Relay contacts for output signals
- ✓ Removable personality setting card
- ✓ Completely protected from:
  - over/under supply voltage
  - over temperature
  - external short circuit motor polarity
  - max dynamic braking cycle
  - broken or inverted tachometer

#### OPTIONS

- ✓ Synoptic: remote check status panel
- ✓ Boostered dumping (with external resistors)

#### SPECIFICATIONS

- ✓ Supply voltage range: 110÷170 VAC (50/60 Hz±10%)
- ✓ Output voltage: 1.35x VAC supply
- ✓ Operating frequency: 5 KHz
- ✓ Operating temperature: 0÷40°C (32÷104°F)
- ✓ Humidity (without condensation): 10÷95%
- ✓ Enable signals: +10÷30 VDC (optocoupled)
- ✓ Analog input reference (differential): ±10 Vdc (24 KOhm)
- ✓ Peak current limitation with speed function



#### DESCRIPTION

The CD 180<sup>®</sup> Servodrive is a traditional transistor converter for DC servomotors. Easy-to-use and extremely trustworthy, it is an ideal solution for retro fitting applications. Every servodrive comes complete with its own power supply, regenerative circuit and internal fan cooling.

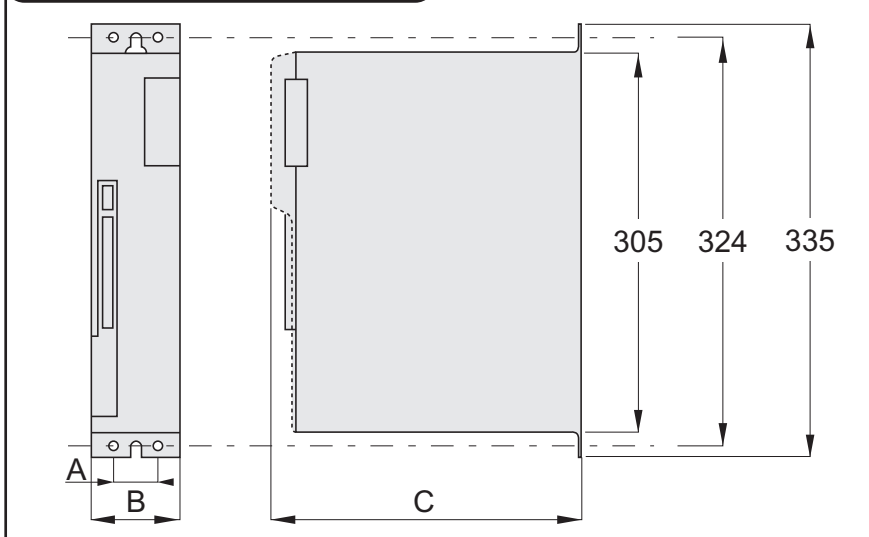
Because of the autogeneration of the internal auxiliary voltages, a three phase transformer with only one secondary is enough for their supply.

Auto transformers are also allowed. Usually the CD 180<sup>®</sup> Servodrive doesn't require external choke before the motor, thanks to its 5 KHz special frequency "cross-modulation".

MODEL	CD 180	CD 180	CD 180	CD 180	CD 180	CD 180	CD 180
SIZE (A)	8/16	12/24	15/30	25/50	30/75	50/100	50/150
Rated Current (A <sub>dc</sub> )	8	12	15	25	30	50	50
Peak Current (A <sub>dc</sub> ) x 5 sec.	16	24	30	50	75	100	150
F2: Supply Line Fuses (T-type = time-lag)	12 A 250 V		16 A 250 V	25 A 250 V	35 A 250 V	50 A 250 V	80 A 250 V
Supply (V <sub>ac</sub> ) (3PH-50/60 Hz)	110÷170 Vac						

Drawings are not to scale (see quotations)

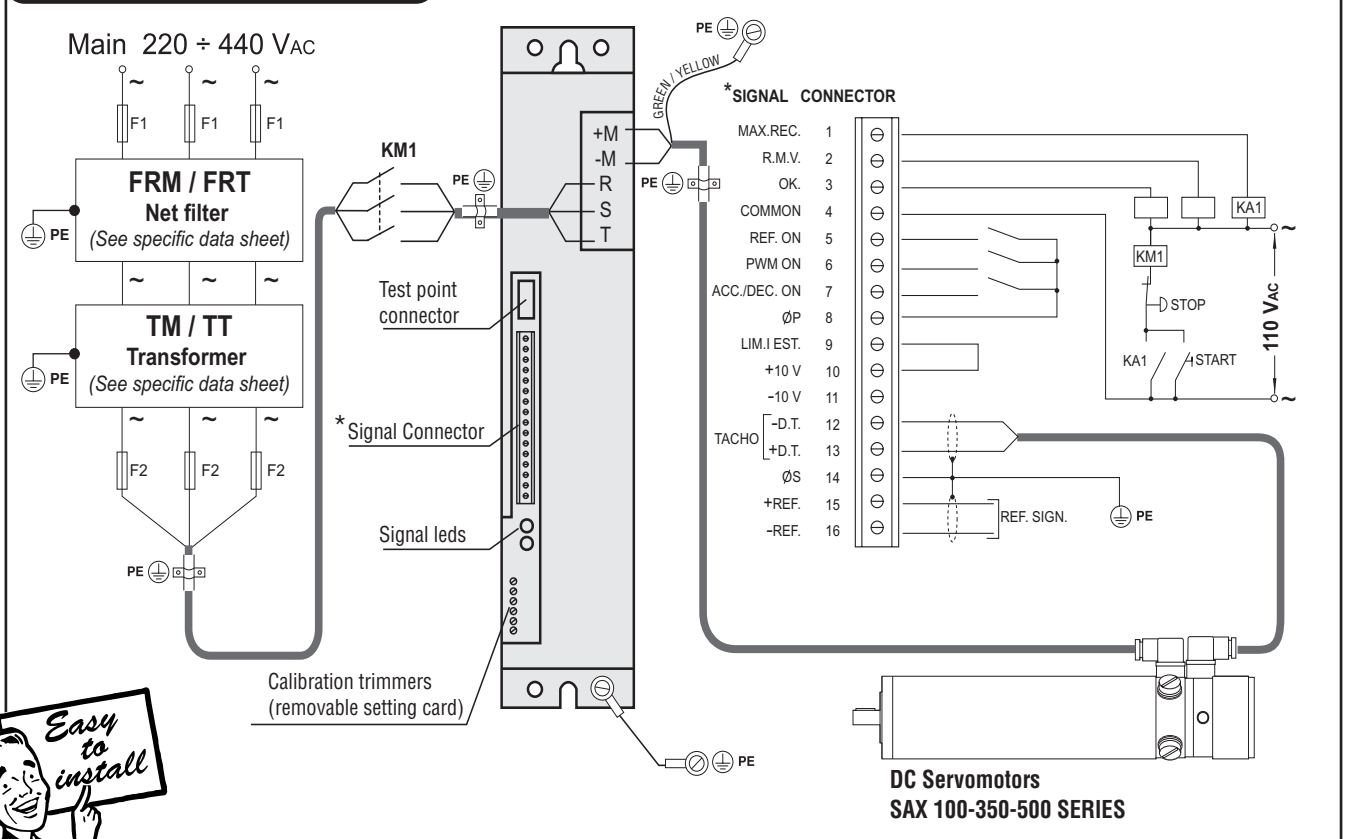
## MECHANICAL DIMENSIONS



REFERENCES		A	B	C	WEIGHT
VERSION	SIZE	mm	mm	mm	
CD 180	8/16	33	66	203	3.6 Kg (8 Lbs)
	12/24				
CD 180	15/30	65	99	204	5.7 Kg (12.5 Lbs)
CD 180	25/50				
CD 180	30/75				
CD 180	50/100	97	132	210	7 Kg (15.4 Lbs)
	50/150				

All dimensions are in mm To obtain the dimensions in INCHES, divide mm by 25.4 Ex:  $\frac{305 \text{ mm}}{25.4} = 12.007 \text{ Inches}$

## CONNECTION DIAGRAM



DC Servomotors  
SAX 100-350-500 SERIES



**ORDERING CODE** **CD - 180 - 25/50 - RX - S - 0000 / TO - RD - XX**

Example: \_\_\_\_\_

**NAME:** DC servo drive line

**AMPLIFIER TYPE:** \_\_\_\_\_

**SIZE:** 8/16 - 12/24 - 15/30 - 25/50 - 30/75 - 50/100 - 50/150

**DUMPING SIZE:** \_\_\_\_\_

RX = internal standard resistors  
R4 = 400W external resistors (optional)  
R8 = 800W external resistors (optional)

**PROTECTION:**  
S = Standard  
T = Tropicalized

**AXOR**  
adjustment  
identification  
number

**ADDITIONAL FEATURES:**  
XX = None

**CONTROL MODE:**  
RD = Differential reference  
IO = Demand Current (torque mode)

**FEEDBACK:**  
TO = Tachogenerator (DC)  
00 = No feedback adjustment (for IO and PD control modes)

Vertriebs- und Systempartner: POPHOF Antriebstechnik, 77933 Lahrbach  
Tel: 07821-983913, Fax 07821-983914, info@pophof.de, www.pophof.de