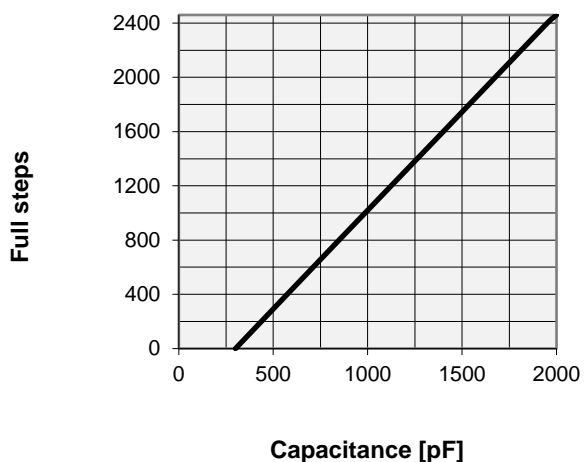
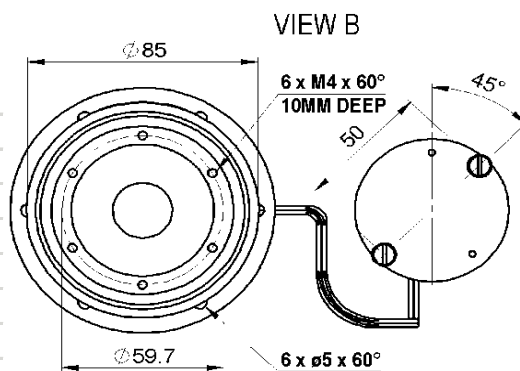


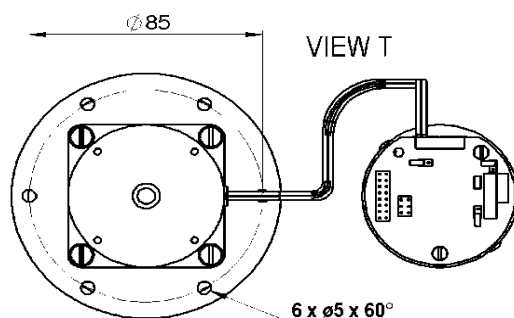
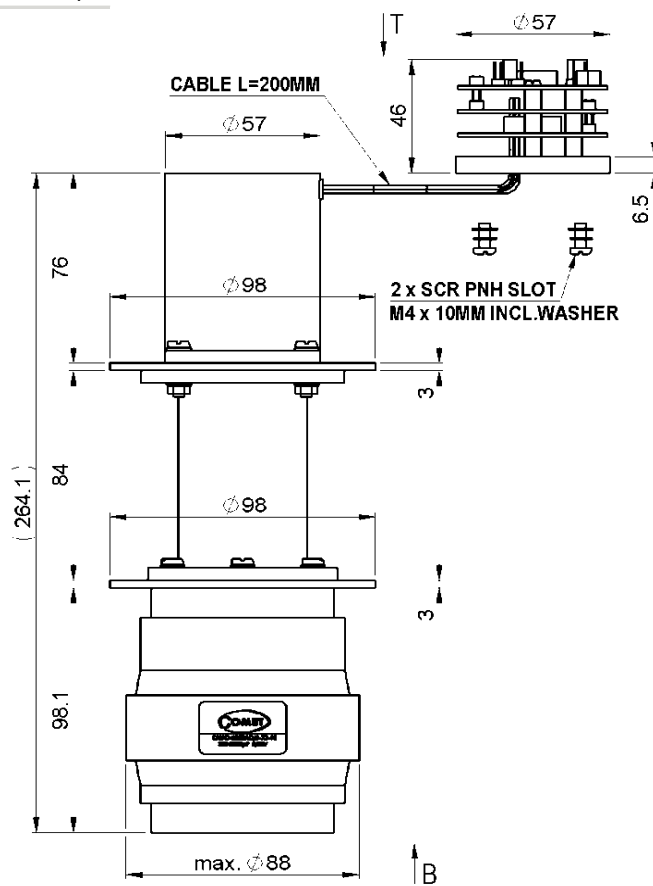
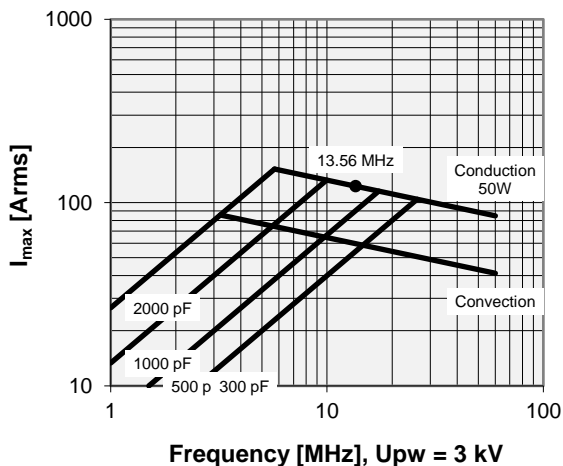
CMPO-2000AC/5-X1-F

Capacitor Specifications

Capacitance C_{max} (nominal)	2000 pF
Capacitance C_{min} (nominal)	300 pF
Voltage (Peak Test U_{pt} / Peak Working U_{pw})	5 kV / 3 kV
Ground to variable end insulation (Peak Test)	25 kV
Capacitance Tolerance (linear Range)	1%
Max. Current I_{max} at 13.56 MHz with	122 Arms
Conduction Cooling	50 W
Self Inductance	≤ 6 nH
Capacitance per 100 steps	69.1 pF
Net Weight	2.8 kg
Ground to variable end capacitance	≤ 3 pF



I_{max} at 25°C ambient and 125°C surface temp. for convection and conduction (50 W) cooling



Note:

Technical information in Service Bulletin
 SB-52 and SB-60 must be considered
 Subject to change without prior notice

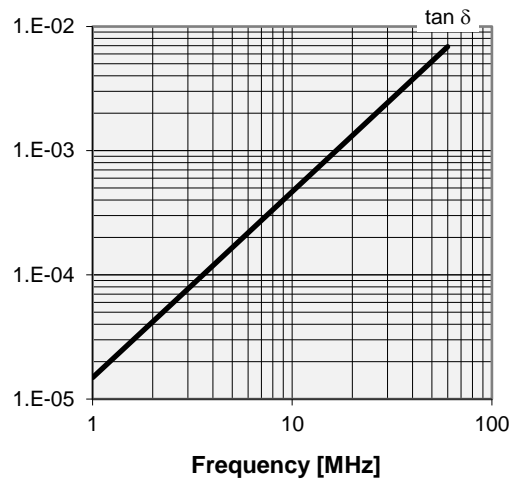
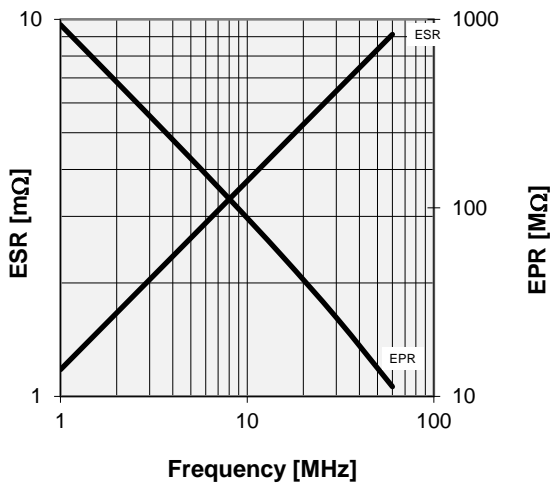
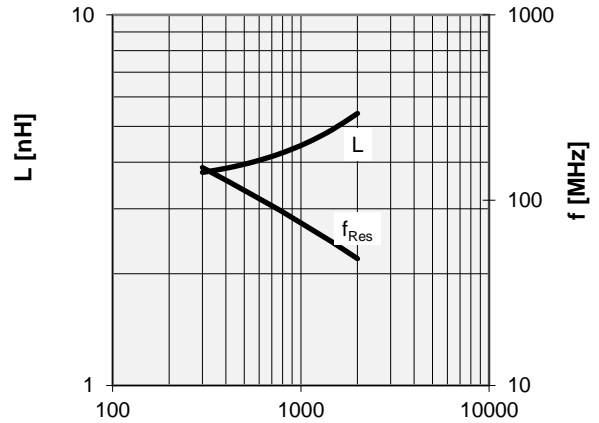
Issue: 06-Jan-2016
 Replaces: 05-Aug-2015

CMPO-2000AC/5-X1-F

Full steps	Nominal Capacitance [pF]	Tolerance
0	300.0	1%
800	848.3	1%
1600	1400.4	1%
2400	1950.8	1%
2460	2000.0	1%

Mechanical stop at > 2000 pF
 Mechanical stop at < 300 pF

Self inductance and resonance frequency



Special Features:
Firmware V.2.2 (p/n 20075972) Higher temperature PCB

General handling information for the integrated drive
 When installing or removing the integrated drive, extreme care must be taken to avoid damage to the body of the integrated drive. Although the integrated drive look very rugged from the outside it must be remembered that, due to the brazing process used to join ceramic and copper, the copper is in a soft, annealed condition and is therefore highly susceptible to mechanical deformation. For this reason, any rough handling, like machining of the flanges, must be avoided. Use existing threads and holes for fixation.

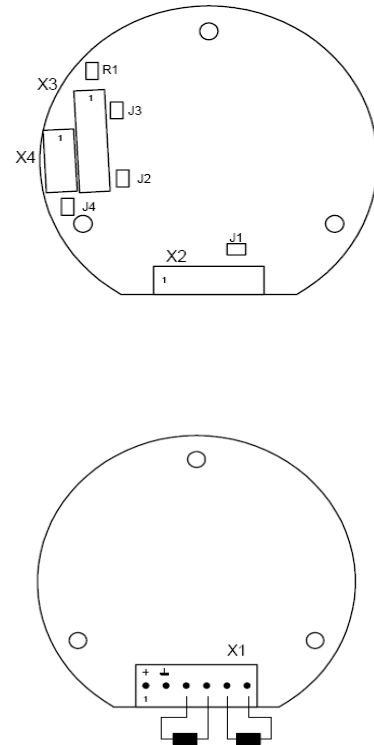
General installation information for the integrated drive
 For all integrated drives we recommend that one side be mounted non-rigid to prevent excessive thermomechanical and external forces from acting on the capacitor.

Note:
 Technical information in Service Bulletin
 SB-52 and SB-60 must be considered
 Subject to change without prior notice

CMPO-2000AC/5-X1-F

Drive Specification	
Interface	RS-232
Tuning speed (end to end)	3 s
Backlash	≤ 2 steps
Operation mode	Bipolar
Nr. of phases	2
Current per phase	1.5 A
Supply voltage (DC)	24 V
Full step angle	1.8°
Motor frame size	56 mm

Layout of the microcontroller PCB



X1 Additional I/O - Connector		
VCC	Pin 1	+14...37 V
VCC	Pin 2	+0 V
OA1 (motor / red)	Pin 3	-
OA2 (motor / blue)	Pin 4	-
OB1 (motor / green)	Pin 5	-
OB1 (motor / black)	Pin 6	-

X2 Additional I/O - Connector		
Left limit switch	Pin 1	-
Right limit switch	Pin 2	-
GND	Pin 3	+0 V
General purpose output	Pin 4	-
VCC	Pin 5	+14...37 V
GND	Pin 6	+0 V
General purpose input	Pin 7	-
DC output	Pin 8	+5 V(max. 20 mA)

X3 Interface to motor driver - Connector				
Interface Typ	RS-232	RS-485	/ Direction	CW / CCW
PIN 1	TxD	+0V (GND)	V (GND)	+0V (GND)
PIN 2	RxD	+0V (GND)	V (GND)	+0V (GND)
PIN 3	+0V (GND)	A (+)	V (GND)	+0V (GND)
PIN 4	+0V (GND)	B (-)	V (GND)	+0V (GND)
PIN 5	+0V (GND)	+0V (GND)	Step	+0V (GND)
PIN 6	+0V (GND)	+0V (GND)	V (GND)	CW
PIN 7	+0V (GND)	+0V (GND)	Direction	+0V (GND)
PIN 8	+0V (GND)	+0V (GND)	V (GND)	CCW

X4 not used

Jumper				
Interface Typ	RS-232	RS-485	/ Direction	CW / CCW
Jumper - J1	Open	Close	N/A	N/A
Jumper - J2	Close	Open	N/A	Open
Jumper - J3	N/A	N/A	Open	N/A
Jumper - J4	N/A	N/A	Open	Open

Note:

Technical information in Service Bulletin SB-52 and SB-60 must be considered
Subject to change without prior notice