Contact instruments with dorsal adjustment

Contact instruments are available in the following executions:
with a moving iron system = EQC
with a moving coil system = PQC

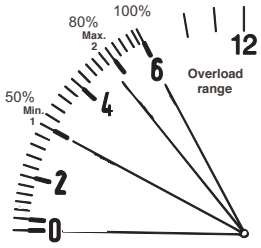
For the non-contact registration of limit values they have: power supply, 2 differential amplifiers, 2 time relays, 2 output relays and – adjustable from outside (on the backside) – 2 potentioinstruments for the adjustment of limit values and the time delay as well as 2 LED lamps on the scale for the control of the switching status.
Contact instruments can be used along with corresponding transducers for the control of current, voltage (alternating and direct), frequency, active power, reactive power, power factor (phase angle), driving speed, temperature and pressure.
Both channels can be adjusted independently of each other on any point of scale by a potentiometer on the backside. Every channel has a 0-30 sec adjustable separated time relay which prevents that peak values activate the contacts. The time relay sets to zero immediately after every peak values and thus prevents a summation of several peak values.
Every channel is equipped with an output relay including change-over contact (changer) - potential-free. The potentioinstruments on the backside of the device are protected by a transparent cover in order to prevent accidental re-adjusting..
2 LEDs on the scale show the switching status.

Contact instruments are deliverable in the following executions:

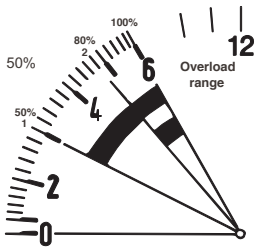
EQC:	EQC 96s/1	1 max. and 1 min. contact
	EQC 96s/2	2 max. (or 2 min.) contacts
PQC:	PQC 96s/1	1 max. and 1 min. contact
	PQC 96s/2	2 max. (or 2 min.) contacts
ISE/2:	1 contact, switches at wrong phase sequence (ISE 96s/2 see page 4/22)	

Technical features of the electronics	
Auxiliary supply:	230 V~ ± 10 % (40-70 Hz)
Output relays:	1 change-over contact (changer) per channel – potential-free
Switching capacity at: ohmic load:	Alternating current 230V, 5 A max. 300W Alternating current 200V, 5 A max. 100W
Hysteresis:	1 % of final scale value
Producing accuracy:	of final scale value 1 %
Adjustment:	From 0-100 % of the nominal value of scale, tolerance +/- 5%
Duration of life:	1 X 10^7 Switching operations at rated switching power
Temperature:	10 °C up to 30 °C

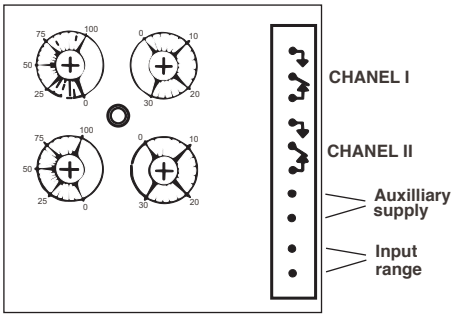
Regulation examples: differential
Differentiated regulation: (.../1)
(Minimum contact at 50 % and maximum contact at 80 %)
As long as the pointer is in the working range, e.g. the measuring value is higher than 50 % and less than 80 % both channels and both illuminating diodes on the scale are inactivated. If the measuring value sinks under 50 % e.g. the pointer is between 0 and 50 % so the channel I is activated, the minimum contact has switched and the illuminating diode on the scale is lighting. If the measuring value is higher than 80 % and 100 % so the channel II is avticated, the maximum contact has switched and the illuminating diode for channel II is lighting while channel I is inactivated again.



Step regulation : (.../2)
(2 maximum contact at 50 % and at 80 %)
The working range is between 0 and 50 % of the scale. If the measuring value is under 50 % both channels and illuminating diodes are inactivated and the first maximum contact was switched on. If the measuring value reaches 80 % or more both channels are activated, e.g. also channel II is switched on and both illuminating diodes are lighting.



Rear view:



Celsa Messgerate España S.L
info@celsaspain.com / +34 96 130 93 78