

Digital Panel Meter Series 353LC

Characteristics

- LED-Display, 3 decades, 16 mm
- Display range -99 .. 999 resp. 000 .. 999
- DIN Standard Case 96 x 48 mm
- Plug-in screw terminal



General

The digital panel meters of serie 353LC are LowCost instruments for industrial area. Depends of the type of panel meter the display range is -99 to 999 resp. 000 to 999. The overflow resp. underflow will be indicated at the display "EEE" resp. "- - -".

Deliverable types

- DC voltage panel meter type U 353LC
min. 60 mV .. max. 400 V
- DC current panel meter type I 353LC
min. 1 mA .. max. 1 A
- AC voltage panel meter type UW 353LC
Sinus min. 60 mV .. max. 400 V
- AC current panel meter Type IW 353LC
Sinus min. 1 mA .. max. 1 A

The input range is specified at order (f.e. 0 - 20 mA = 0 - 400).

Higher current input ranges are realisable with an external shunt or current transformer.

Construction

The panel meters have a 3 decades display. The numeral are 16 mm high and has a very luminous intensity, so that the display is still very good legible even from a distance of 10 m. The colour of the display is red (optional green). To improve the contrast the panel meters have a red (optional green) filter plate on the display.

The panel meters are placed in a high-impact DIN standard case 96 x 48 x 107 mm. To connect the input and output signals there are screw terminals at the rear. The front frame colour is black. (Optional grey RAL 7037, grey RAL 7032 or grey RAL 7035). The installation depth inclusive the screw terminals is 123 mm. To mount the instrument in the panel a clamping frame is available.

Decimal point

The panel meters have an external decimal point controlling at the screw terminal 2 and 3.

Bridge between 2 and 6	Point X . X X
Bridge between 3 and 6	Point X X . X

Power supply

The panel meters contains an integrated power supply. The power supply is interpreted for 230 V AC. Optional the panel meters are deliverable for the power supply 115 V AC, 24 V AC or 18 .. 36 V DC. The power supply is isolated from the further electronic.

Adjustment

The panel meters are precalibrated. When delivered no adjustment is necessary. If a new adjustment is required there are two potentiometers P1 and P2 at the rear. It is possible to vary the input offset in the range ± 20 Digit by P1 and the scale factor in the range $\pm 5\%$ of full scale by P2.

Service Instruction

At power supply 230 V AC resp. 115 V AC or 24 V AC The power must be connected to screw terminal 7 (L1) and screw terminal 8 (N), ground to screw terminal 9 (PE). At power supply 18 to 36 V DC the power supply must be connected to screw terminal 8 (+) and 7 (-). Attention must be paid that the power supply will agree with the voltage noticed at the name plate.

The input signal must be connected to screw terminal 5 (UE resp. IE) and screw terminal 6 (Analog-Gnd).

Electrical Data

Input range	
Voltage DC/AC (Sinus)	min. 60 mV / max. 400 V
Input resistance	> 1 MΩ
Current DC/AC (Sinus)	min. 1 mA / max. 1 A
Input voltage	max. 200 mV
Accuracy	
U 353LC / I 353LC	0,1 % of range ± 1 Digit
UW 353LC / IW 353LC	0,5 % f.s. ± 1 Digit
Conversion rate	approx. 4 measurings per sec
Temperature coefficient	< 30 ppm/K
Offset adjustment	P1, approx. ± 20 Digit
Full scal adjustment	P2, approx. ± 5% v. Mb.
Decimal point	
Input logic	NPN, max. 30 V
Power supply voltage AC	230 V, +6%/-10%, 50/60 Hz
optional	115 V, +6%/-10%, 50/60 Hz
	24 V, +6%/-10%, 50/60 Hz
Isolation voltage	2,5 kV / 1 min
Power supply voltage DC	18 .. 36 V DC
Isolation voltage	500 V / 1 min
Power consumption	AC 4,6 VA, DC 70 mA

Mechanical Data

Display	3 decades, 16 mm, red setting decimal point -sign at negative values
Case	switch board mounting DIN 43700
Dimension (B x H x T)	96 x 48 x 107 mm
Depth	123 mm incl. screw terminal
Mounting	switch board mounting
Weight	approx 300 g
Connections	screw terminal

Environment conditions

Operating temperature	0 .. 50 °C
Storage temperature	-20 .. 70 °C
Humidity	< 80 %, not-condensing
Protection	protective class II
Front protection	IP 40
Field of application	class 2 overvoltage protection II
CE	in conform with 89/336/EWG NSR 73/23/EWG

Ordering Information

xx 353LC-	0								
Housing									
0 Switch board									
Front frame colour									
0 black									
1 grey RAL 7037									
2 grey RAL 7032									
3 grey RAL 7035									
Front design									
0 ERMA-Meter Logo									
1 No Logo									
Power supply									
0 230 V/AC									
1 115 V/AC									
2 24 V/AC									
3 18 .. 36 V/DC, isolated									
Display colour									
0 red									
1 green									
Reserve									

Unit overprint

Please specify in clear text at order !

Screw terminal indication

screw terminal 9	ground PE
screw terminal 8	power supply N
	or power supply (+)
screw terminal 7	power supply L1
	or power supply (-)
screw terminal 6	analog-GND
screw terminal 5	signal input U _E resp. I _E
screw terminal 4	n.c.
screw terminal 3	decimal point XX.X
screw terminal 2	decimal point X.XX

Dimensions and Mounting

