

# SLR 140C 12

## OVER CURRENT AND EARTHFAULT RELAY WITH IEC61850

In the field of power system protection, Stelmec offers digital relays which are enabled with recent technologies. The Stelmec modular multi function protection relay SLR140C12 monitors the three phase electrical networks & protects against faults. It is designed for highly electrical noisy substation environment. These relays come with the following extensive protection features: 50, 51, 50N, 51N, 50G, 51G, 37, 46, 49, 50BF, 62CLP, 46BC, 79, 64R, 74TC, 86, 59N (NDR), HiZ & offer 1 or 2 or 4 group settings & communication protocol options; IEC60870-5-103, MODBUS-RTU & IEC61850.



### Functional Overview: Protection & Control Functions

- Two Stages Over Current, Calculated Earth Fault and Measured Earth Protection Relay (50/51/ 50N/ 51N/ 50G/ 51G)
- IDMTL Characteristics - NI, VI, EI, LTI, 3s, 1.3s, 0.6s & DTL for Phase & Earth Fault
- Transient Free Phase Fault & Earth Fault High Set Elements
- Latest 999 Log With Time Stamp Resolution
- Latest 999 Events Log With Time Stamp Resolution
- User Friendly Local HMI
- Hardware and Software Self Diagnosis
- Four Discrete Elements For Phase Fault & Earth Fault
- High Impedance Fault Protection (HiZ)
- Neutral Displacement Protection (NDR) for Blocking Earth Element during Single Phase Load Conditions
- Programming Logic Equation & Protection Blocking Feature
- 1 or 2 or 4 Setting Groups – Auto or Manual and Digital Input Based Selection
- IEC 61850 and/or IEC 60870-5-103 and/or MODBUS-RTU Communication Protocol for SCADA
- Inbuilt Disturbance Recorder for Latest 99 Fault
- User Configurable Relay Digital Outputs , Digital Inputs & LEDs

## Technical Specifications

Frequency	50 Hz	
Rated Current (In)	1A / 5A Software configurable	
Auxiliary Power Supply	(24/30/110/220) VDC, 230VAC	
<b>Burdens</b>		
OC & EF CT	< 0.2VA@5A / < 0.1VA@1A	
Auxiliary Power Supply	< 12W – operating relays activated / 3W – under quiescent condition	
Accuracy	< ± 5%	
<b>Contact Ratings:</b>		
Trip Relay	15A @ 230V AC / 15A @ 28V DC	
Auxiliary Power Supply	6A @ 230V AC / 6A @ 24V DC	
Configurable		
Digital O/P	DOs: <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>8 Nos.</td></tr></table>	8 Nos.
8 Nos.		
Digital I/P	DIs: <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>8 Nos.</td></tr></table>	8 Nos.
8 Nos.		
<b>Indications</b>		
	LED: 11 LED indications	
	LCD: (16 x 2)/20x4 Alphanumeric	

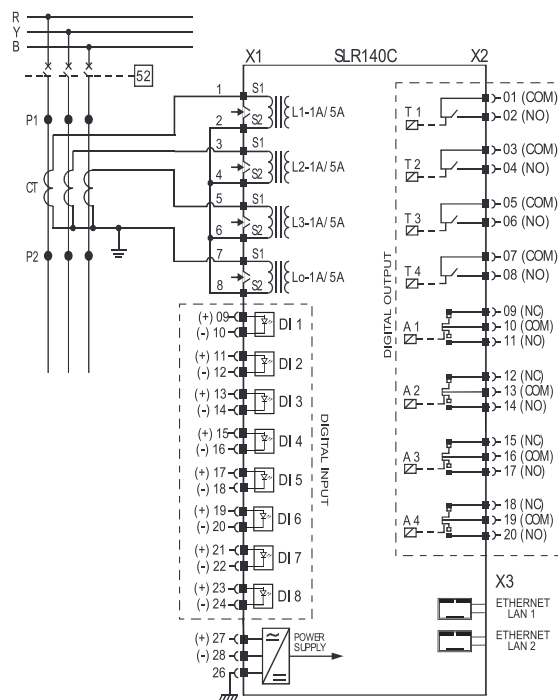
### Environment Temperature:

Operational Range	-10°C to +55°C
Storage Range	-20°C to +70°C
Ref. Standard	IEC 60255 / IS 3231

## Casing

- Overall Dimensions (WxHxD): (166 x 176 x 182) mm ~
- Cutout size (WxH): (155 x 165) mm ~
- Degree of Protection: IP 54
- Weight: 2.85 Kg ~
- Draw-out / Fixed type

Typical Terminal Diagram



- There is a continuous effort at Stelmec to keep abreast of latest technology in line with customers' requirements and hence the product specifications are subject to change.
- Products described in this catalogue are manufactured and supplied according to Certified Management System ISO 9001:2015.
- Product variants provide different combinations of features / specifications listed above & need not necessarily be a part of single variant.