

SLR 140C

NUMERICAL OVER CURRENT AND EARTH FAULT PROTECTION RELAY

In the field of power system protection, Stelmec offers digital relays which are enabled with recent technologies. The Stelmec modular multifunctional protection relay SLR 140C monitors and protects the electrical networks against all types of phase to phase and phase to earth faults.



Salient Features

- Site selectable 1A & 5A CT Input
- Two Stages Over Current and Two Stage Earth Fault Protection Relay
- IDMT Characteristics - NI, VI, EI, LTI, 3s, 1.3s, 0.6s & DTL for Phase and Earth Fault
- Latest 999 Fault & Events with 1ms Time Stamp Resolution
- User friendly Local HMI
- Hardware and Software Self-Diagnosis
- NDR Controlled Earth Fault Protection
- Circuit Breaker Fail Protection
- Trip Circuit Supervision
- Multi-shot Autoreclosure
- Cold Load Pick up
- 1 or 2 or 4 Setting Groups – Auto or Manual Selection
- IEC 60870-5-103 and/or MODBUS-RTU Communication Protocol
- Inbuilt Disturbance Recorder
- User Configurable DI / DO
- Broken Conductor Detection

Protection Functions and Settings

Device No.	Relay Functions	Settings
51	IDMTL Over Current Protection	2% to 400%, in steps of 1%
51N	IDMTL Earth Fault Protection	2% to 400%, in steps of 1%
50	High Set Over Current Protection	5% to 4000%, in steps of 1%
50N	High Set Earth Fault Protection	5% to 2000% in steps of 1%
50BF	Circuit Breaker Failure Protection	0.01s to 2s
79R	Auto Re-Close Relay	Multi shot (optional)

Casing

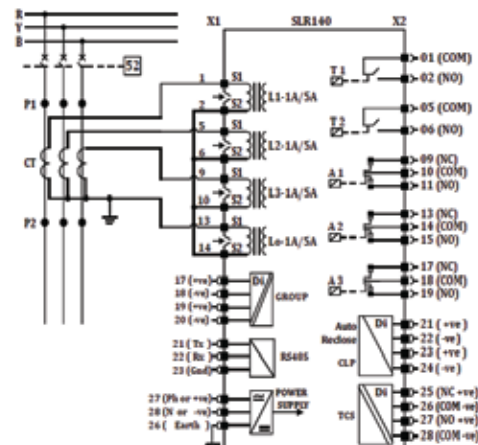
- Overall Dimensions (W×H×D): (180×134×212) mm ~
- Cutout size (H×W): (156×108) mm ~
- Degree of Protection: IP 54
- Weight: 2.5 Kg ~
- Draw-out / Fixed Type

Technical Specifications

Rated Current (In)	1A/ 5A
Frequency	50 Hz
Time Multiplier	0.01 to 2.0 in steps of 0.005
Low Set Delay	0.00 sec to 2000 secs
High Set Delay	0.00 sec to 20.0 secs
CB Fail Timers	0.01 sec to 2 secs
Accuracy	< ± 5%
Auxiliary Power Supply Range	24/30/110/220/VDC & 230 VAC
Contact Ratings:	
Relay	15A @ 230V AC / 15A @ 28V DC
Auxiliary Relay	6A @ 230V AC / 6A @ 24V DC
Digital O/P	06 nos
Digital I/P	07 nos
Indications	LED: 9 LED indications
	LCD: 16 x 2 Alphanumeric

Burdens for:	
OC & EF CT	< 0.2VA@5A / < 0.1VA@1A
Aux. Power	< 12W—operating relays activated / 8W—under quiescent condition
Cold Load Pickup Setting:	
CLP I>	10% to 3200%
Delay	0.01 to 20 secs
Blocking function	ALL/I>/I>>/EF>/EF>>
Temperature:	
Operational Range	-10°C to +55°C
Storage Range	-20°C to +70°C
Ref. Standard	IEC 60255 / IS 3231

Typical Terminal Diagram



- There is a continuous effort at Stelmec to keep abreast of latest technology in line with customer 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.