

Electrical Standard Products (ESP) Offices:

HEAD OFFICE

L&T Electrical & Automation
L&T Business Park, TC 2, Tower 'B'
3rd Floor, Gate No 5
Saki Vihar Road, Powai
Mumbai 400 072
Tel: 022-67052874 / 2737 / 1156
e-mail: cic@LNTEBG.com

BRANCH OFFICES

L&T Electrical & Automation
501, Sakar Complex I
Opp. Gandhigram Rly. Station
Ashram Road
Ahmedabad 380 009
Tel: 079 4900 4000 / 4010
e-mail: esp-ahm@LNTEBG.com

L&T Electrical & Automation
No 38, Cubbon Road
Bengaluru 560 001
Tel: 080-46136103 / 100
e-mail: esp-blr@LNTEBG.com

L&T Electrical & Automation
131/1, Zone II, Maharana Pratap Nagar
Bhopal 462 011
e-mail: esp-bho@LNTEBG.com

L&T Electrical & Automation
Plot No. 559, Annapurna Complex, 2nd Floor
Lewis Road
Bhubaneswar 751 014
Tel: 0674-2436690 / 9437453579 / 9437284376
e-mail: esp-bsr@LNTEBG.com

L&T Electrical & Automation
Aspire Towers, 4th Floor
Plot No. 55, Phase-I
Industrial & Business Park
Chandigarh 160 002
Tel: 0172-4646840 / 41 / 42 / 44 / 53
e-mail: esp-chd@LNTEBG.COM

L&T Electrical & Automation
L&T Construction Campus
TC-1 Building, II Floor
Mount-Poonamallee Road
Manapakkam
Chennai 600 089
Tel: 044-2270 6800
e-mail: esp-maa1@LNTEBG.com

L&T Electrical & Automation
Electrical Standard Products
Manufacturing Facility
L&T Bypass Road, Malumichampatti
Coimbatore 641 050
Tel: 0422-6683031
e-mail: esp-cbe@LNTEBG.com

L&T Electrical & Automation
3rd Floor, 1&2 Vijay Park,
Main Chakrata road
Ballapur Chowk
Dehradun 248001
Tel: +91 9582252411

L&T Electrical & Automation
Khairasol, Degaul Avenue
Durgapur 713 212
Tel: 0343-2540448 / 2540449 / 2540443
e-mail: esp-dgp@LNTEBG.com

L&T Electrical & Automation
5, Milanpur Road, Bamuni Maidan
Guwahati 781 021
Tel: +91 8876554417
e-mail: esp-ghy@LNTEBG.com

L&T Electrical & Automation
2nd Floor, Vasantha Chambers
5-10-173, Fateh Maidan Road
Hyderabad 500 004
Tel: 040-67015052
e-mail: esp-hyd@LNTEBG.com

L&T Electrical & Automation
Monarch Building, 1st Floor
D-236 & 237, Amrapali Marg
Vaishali Nagar
Jaipur 302 021
Tel: 0141-4385914 to 18
e-mail: esp-jai@LNTEBG.com

L&T Electrical & Automation
Akashdeep Plaza, 2nd Floor
P. O. Golmuri
Jamshedpur 831 003
Jharkhand
Tel: 0657-2340502 / 08
e-mail: esp-jam@LNTEBG.com

L&T Electrical & Automation
Skybright Bldg; M. G. Road
Ravipuram Junction, Ernakulam
Kochi 682 016
Tel: 0484-4409420 / 4 / 5 / 7
e-mail: esp-cok@LNTEBG.com

L&T Electrical & Automation
3-B, Shakespeare Sarani
Kolkata 700 071
Tel: 033-48006001
e-mail: esp-kol@LNTEBG.com

L&T Electrical & Automation
No. 10, Fortuna Tower, 2nd Floor
Rana Pratap Marg, Near NBRI
Lucknow 226001
e-mail: esp-Lko@LNTEBG.com

L&T Electrical & Automation
No: 73, Karpaga Nagar, 8th Street
K. Pudur
Madurai 625007
Tel: 0452-2567405 / 2561068 / 2561657
e-mail: esp-mdu@LNTEBG.com

L&T Electrical & Automation
L&T Business Park, TC 2, Tower 'B'
3rd Floor, Gate No 5
Saki Vihar Road, Powai
Mumbai 400 072
Tel: 022-67052874 / 2737 / 1156
e-mail: esp-bom@LNTEBG.com

L&T Electrical & Automation
Unnati Building, 2nd Floor
Automation Campus
A-600, TTC Industrial area
Shil-Mahape road, Mahape
Navi Mumbai 400710
Tel: +91 22 67226502 / 67226300

L&T Electrical & Automation
12, Shivaji Nagar
North Ambajhari Road
Nagpur 440 010
Tel: 0712-2260012 / 6606421
e-mail: esp-nag@LNTEBG.com

L&T Electrical & Automation
A-25, Imperia Complex, First Floor,
Mohar Cooperative Industrial Estate,
Near Sarita Vihar Metro Station,
Mathura Road
New Delhi 110 044
Tel: 011-41419514 / 5 / 6
e-mail: esp-del@LNTEBG.com

L&T Electrical & Automation
Grand Chandra, 2nd Floor
Fraser Road
Opposite Doordarshan Kendra
Patna 800001
e-mail: esp-patna@LNTEBG.com

L&T Electrical & Automation
L&T House
P. O. Box 119
191/1, Dhole Patil Road
Pune 411 001
Tel: 020-48544395 / 48544279
e-mail: esp.pnq@LNTEBG.com

L&T Electrical & Automation
Crystal Tower,
4th Floor, G. E. Road
Telibandha
Raipur 492 006
Tel: +91 9755508228
e-mail: esp-raipur@LNTEBG.com

L&T Electrical & Automation
3rd Floor
Vishwakarma Chambers
Majura Gate, Ring Road
Surat 395 002
Tel: 0261-2473726
e-mail: esp-sur@LNTEBG.com

L&T Electrical & Automation
Radhadaya Complex
Old Padra Road
Near Charotar Society
Vadodara 390 007
Tel: 0265-6613610 / 1 / 2
e-mail: esp-bar@LNTEBG.com

L&T Electrical & Automation
Door No. 49-38-14/3/2, 1st floor,
NGGO's Colony, Akkayyapalem,
Visakhapatnam 530 016
Tel: 0891-2791126 / 2711125
e-mail: esp-viz@LNTEBG.com



L&T Electrical & Automation

i-PROTECTOR



Product improvement is a continuous process. For the latest information and special application, please contact any of our offices listed here. Product photographs shown for representative purpose only.



L&T Electrical & Automation

L&T Electrical & Automation, Electrical Standard Products
L&T Business Park, TC-2, Tower B, 3rd Floor, Gate No. 5, Saki Vihar Road, Powai,
Mumbai - 400 072, INDIA www.lntebg.com

Customer Interaction Center (CIC)
BSNL / MTNL (toll-free): 1800 233 5858 Reliance (toll-free): 1800 200 5858
Tel: 022 6774 5858 Email: cic@lntebg.com Web: www.lntebg.com

Features

- Micro-controller based protection design
- Digital Ammeter and Voltmeter in select variants
- Auto/Manual/Bypass Mode available
- Suitable for all starters - upto 40A
- Protections available - Voltage Single Phasing, Current Single Phasing, Voltage unbalance fault from supply side, Current unbalance fault from motor side, Phase reversal fault, Under voltage fault, Overvoltage fault
- Dry-run fault (Adjustable current setting and adjustable reset time)
- Adjustable ON Delay

Recommended *i*-PROTECTOR for L&T starters:

Product	DOL						Star - Delta							
	3-Phase Starter			1- Phase Starters	3- Phase Controller	1- Phase Controller	3-Phase SASD / FASD Starters			3-Phase Controller (FASD)				
	MK1 / MK2	MU1 / MU1H / MU2 / MU3	MB1 / MB2	ML1.5 / ML2 /3	MU-2P	MU-G6	MU-G10 / MU-G10H	MR-G2 / MR-G3	MK1	MU1 / MU2	MB1 / MB2	ML1.5 / ML2 /3	MU-G15	MU-G20 / MU-G20H
i-AD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
i-ADS / i-ADSM	✓	✓	✓	✓		✓*	✓*		✓	✓	✗	✓	✓*	✓*
i-VDS / i-VDSM	✓	✓	✓	✓		✓*	✓*		✓	✓	✗	✓	✓*	✓*

* Note: MU-G Controller is provided with Sz5 /Sdz5. In case of upgradation, use i-ADS, i-ADSM, i-VDS, i-VDSM in place of SPPR
 ✓ Note: i-Protector is compatible with the mentioned starter

i-PROTECTOR [HSN Code 8536]

Product Designation	Product Details	240 V	360 V	380 V	415 V	Std. Pkg. (Nos.)
i-AD	Dry run protection relay (current based)	CS90861B000				1
i-AD	Dry run protection relay (current based)		CS90861C000	CS90861L000	CS90861D000	1
i-ADS	Single phasing preventer & dry run protection relay (current based)		CS90862C000	CS90862L000	CS90862D000	1
i-ADSM	Single phasing preventer & dry run protection relay + VI meter (current based)		CS90863C000	CS90863L000	CS90863D000	1
i-VDS	Single phasing preventer & dry run protection relay (voltage based)		CS90866C000	CS90866L000	CS90866D000	1
i-VDSM	Single phasing preventer & dry run protection relay + VI meter (voltage based)		CS90875C000	CS90875L000	CS90875D000	1

Technical Specification

Type Designation	i-AD	i-ADS	i-ADSM	i-VDS	i-VDSM
System Supply Voltage	3Ph, 415 Vac, 50 Hz 1 Ph, 230 Vac, 50 Hz	3Ph, 360/380/415 Vac, 50 Hz			
Modes of Operation	1) Auto, 2) Manual, 3) Bypass				
Contact Rating	5A @ 240 Vac (Resistive Load)				
ON Time Delay	25 sec ± 5 sec	30 sec to 5 min ± 10%			
Trip Time Delay	< 3 sec	< 6 sec			
Day Run Setting	60-90% (± 5%) or Set Current				
Dry Run Reset Delay	1hr / 3hrs ± 10%	Auto Reset for Single Phasing /unbalance fault (30 sec ± 5 sec) Auto reset for over voltage fault (5 sec ± 1 sec)Auto reset for dry run fault (1 hr / 3hrs ± 10 % Auto Reset for Dry Run Fault In Auto Mode			
Start Delta Time	2 - 30 sec ± 10% (+200ms for Relay)				
Pump Rating	3 - 20 HP for 360V, 380V, 415V Coils 0.5 - 7.5 HP for 230V Coil	3 - 20 HP			
Current Range	3.6 - 40 A (Inbuilt CT)	4 - 40 A (Inbuilt CT)			
Terminal Capacity	1.5 - 2.5 sq. mm	1.5 - 2.5 sq.mm			
Mounting Dimensions	56.5 x 80.5	56.5 x 80.5			
Overall Dimensions	96 x 72 x 113.5	96 x 72 x 113.5			
Weight	300 gms Approx	320 gms Approx.	340 gms Approx.	320 gms Approx.	340 gms Approx.
Standard Conformity	IEC 60947 - 4 - 1 + AI : 2012, IEC 61000 - 4 - 2/3/4/5, CISPR14 - I : 2005				