




Automation

Power Supplies

Power Supplies

- Wieland P1324
- Wieland P3324
- Wieland PB1325
- IDECC PS5R326
- IDECC PS6R326



Ethernet Switches

Ethernet Switches

- Wieland Wienet327
- Weidmuller BasicLine327



Limit Switches

Limit Switches

- Eaton LS Titan328-329



Safety Relays

Safety Relays

- Wieland SAMOS330-331



Soft Starts

Soft Starts

- Eaton DE1332
- Schneider Altistart 01334
- Schneider Altistart 22334
- Schneider Altistart 48335



Variable Speed Drives

Variable Speed Drives

- Eaton DC1333
- Schneider Altivar 212336-337



Control Relays

Control Relays

- Eaton Easy 500338
- Eaton Easy 700338-339
- Lovato Kinco340-341



HMI Displays

HMI Displays

- Eaton MFD339
- Lovato LRX341
- Lovato LRH341



Energy Meters

Energy Meters

- Lovato DME342

Multi Meters

- Lovato DMG343



The wipos P1 switch mode power supplies cover a range from 35W - 570W; 1.25A - 20A Single Phase and 240W - 960W; 10A - 40A Three Phase.

- Automatic or wide input voltage range
- DIN rail mounting modular design
- Auto resetting output overcurrent protection
- Full load up to 60°C
- Short Circuit Protection



81.000.6120.0

wipos P1 Power Supplies - 24VDC Output

REF NO	Watts	Output Current	Output Voltage	PRICE
Input - 85-264VAC; 90-375VDC				
81.000.6110.0	35W	1.25A	24VDC	50.29
	88.5mmH x 43.5mmW x 114mmD			
81.000.6120.0	70W	2.5A	24VDC	58.85
	88.5mmH x 43.5mmW x 114mmD			
Input - 115/230VAC Auto; 210-375VDC				
81.000.6135.0	108W	3.8A	24VDC	95.65
	123.6mmH x 63.2mmW x 123.6mmD			
81.000.6130.0	142W	5A	24VDC	88.31
	123.6mmH x 63.2mmW x 123.6mmD			
81.000.6140.0	285W	10A	24VDC	129.99
	123.6mmH x 83mmW x 123.6mmD			
81.000.6150.0	570W	20A	24VDC	214.61
	123.6mmH x 175mmW x 123.6mmD			

81.000.6150.0



wipos P1 Power Supplies - 12VDC Output or 48VDC Output

REF NO	Watts	Output Current	Output Voltage	PRICE
Input - 85-264VAC; 90-375VDC				
81.000.6132.0	60W	5A	12-14VDC	64.92
	88.5mmH x 43.5mmW x 114mmD			
Input - 115/230VAC Auto; 210-375VDC				
81.000.6142.0	120W	10A	11.4-14.5VDC	97.50
	123.6mmH x 63.2mmW x 123.6mmD			
Input - 115/230VAC Auto; 210-375VDC - Output 47-56V				
81.000.6134.0	480W	20A	47-56VDC	143.47
	123.6mmH x 83mmW x 123.6mmD			

wipos P3 - 3 Phase Power Supplies - 24VDC Output

REF NO	Watts	Output Current	Output Voltage	PRICE
Input - 340-575VAC; 480-820VDC				
81.000.6160.0	120W	5A	22.5-28.5VDC	128.78
	123.6mmH x 75mmW x 118.2mmD			
81.000.6170.0	240W	10A	22.5-28.5VDC	176.08
	123.6mmH x 89mmW x 118.2mmD			
81.000.6180.0	480W	20A	22.5-28.5VDC	257.53
	123.6mmH x 150mmW x 118.2mmD			
81.000.6190.0	960W	40A	22.5-28.5VDC	440.18
	123.6mmH x 276mmW x 118.2mmD			



81.000.6210.0



81.000.6220.0

wipos Modules

REF NO	Description	PRICE
81.000.6200.0	Redundancy Module R20 - 20A 21-28VDC Input	60.45
	90mmH x 54mmW x 114mmD	
81.000.6210.0	Fusing Module FM4-10 - 4 x 10A Circuits 18-30V Input	55.39
	96mmH x 48mmW x 68mmD	
81.000.6220.0	Uninterrupted Power Supply UPS24-30 Input: 24VDC; 35A Max Output: 18.7-28V; 30A Max	155.44
	90mmH x 54mmW x 115mmD	

The wipos PB1 switch mode power supplies are of a modular design and thus offering the same height and depth of a standard circuit breaker.

- Universal input 100-240V AC/120-375V DC
- DIN rail mounting modular design
- Auto resetting output overcurrent protection
- Full load up to 60°C
- Short Circuit Protection

wipos PB1 Power Supplies - 5VDC Output

REF NO	Watts	Output Current	Output Voltage	PRICE
81.000.6321.0	7.5W	1.5A	5V	35.20
	91mmH x 18mmW x 56.5mmD			
81.000.6331.0	15W	3A	5V	46.00
	91mmH x 35mmW x 56.5mmD			



81.000.6310.0



81.000.6300.0

wipos PB1 Power Supplies - 12VDC Output

REF NO	Watts	Output Current	Output Voltage	PRICE
81.000.6302.0	10W	0.83A	12VDC	35.20
	91mmH x 18mmW x 56.5mmD			
81.000.6322.0	24W	2A	12VDC	46.00
	91mmH x 35mmW x 56.5mmD			
81.000.6332.0	30W	2.75A	12VDC	46.00
	91mmH x 53mmW x 56.5mmD			
81.000.6342.0	54W	4.5A	12VDC	62.29
	91mmH x 71mmW x 56.5mmD			



81.000.6330.0

wipos PB1 Power Supplies - 24VDC Output

REF NO	Watts	Output Current	Output Voltage	PRICE
81.000.6300.0	10W	0.42A	24VDC	34.15
	91mmH x 18mmW x 56.5mmD			
81.000.6310.0	24W	1A	24VDC	44.67
	91mmH x 35mmW x 56.5mmD			
81.000.6320.0	36W	1.5A	24VDC	52.56
	91mmH x 53mmW x 56.5mmD			
81.000.6330.0	60W	2.5A	24VDC	60.45
	91mmH x 71mmW x 56.5mmD			
81.000.6340.0	100W	4.2A	24VDC	82.78
	91mmH x 90mmW x 56.5mmD			

81.000.6340.0



Visit our website at www.ilecsys.co.uk or scan QR code for further technical information



The PS5R-V Slim Line power supply from IDEC covers a range from 10W to 240W.

- Universal input 85-264VAC/100-370VDC
- IP20 Spring-Up, fingersafe terminals
- DIN rail or panel mount with optional bracket
- Overcurrent protection with auto-reset
- CE Marked
- Approved for use in Class 1 Division 2 hazardous locations
- 10W - 90W meet NEC Class 2 Output Ratings
- EN61204-3 EU Low Voltage Directive, EMC Directive, RoHS Directive
- Five Year Factory Warranty



PS6R-G24

PS6R Switching Power Supplies

The IDEC PS6R power supply features the same benefits as the PS5R with the additional benefit of having Output Voltage expansion modules offering lower voltage output variations.

REF NO	Watts	Output Current	Input Current	Output Voltage	PRICE
PS6R-F24	120W	5A	0.7A/230V	21.6-26.4VDC	132.51
				125mmH x 37mmW x 125mmD	
PS6R-G24	240W	10A	1.2A/230V	21.6-26.4VDC	163.77
				125mmH x 60mmW x 125mmD	
PS6R-J24	480W	20A	2.3A/230V	21.6-26.4VDC	226.60
				125mmH x 85mmW x 125mmD	

PS5R-V Slim Line Power Supplies - 5V or 12V Output

REF NO	Watts	Output Current	Input Current	Output Voltage	PRICE
PS5R-VB05	10W	2A	0.3A	5VDC	37.08
				90mmH x 22.5mmW x 95mmD	
PS5R-VB12	15W	1.3A	0.3A	12VDC	37.08
				90mmH x 22.5mmW x 95mmD	
PS5R-VC12	30W	2.5A	0.6A	12VDC	43.26
				90mmH x 22.5mmW x 95mmD	

5 YEAR WARRANTY



PS5R-V Slim Line Power Supplies - 24VDC Output

REF NO	Watts	Output Current	Input Current	Output Voltage	PRICE
PS5R-VB24	15W	0.65A	0.19A	24VDC	37.08
				90mmH x 22.5mmW x 95mmD	
PS5R-VC24	30W	1.3A	0.3A	24VDC	43.26
				90mmH x 22.5mmW x 95mmD	
PS5R-VD24	60W	2.5A	0.8A	24VDC	53.56
				95mmH x 36mmW x 108mmD	
PS5R-VE24	90W	3.75A	0.6A	24VDC	63.86
				95mmH x 36mmW x 108mmD	
PS5R-VF24	120W	5A	0.7A	24VDC	87.55
				115mmH x 46mmW x 121mmD	
PS5R-VG24	240W	10A	1.2A	24VDC	131.84
				125mmH x 60mmW x 125mmD	

PS9Z-6RM4



PS9Z-6RM1



DC-DC Converter Units for PS6R

REF NO	Description	PRICE
PS9Z-6RM1	Output +5V, 2A, 10W	28.81
PS9Z-6RM2	Output +12V, 1A, 12W	26.86
PS9Z-6RM3	Output +5V, 1A / -5V 1A, 10W	34.67
PS9Z-6RM4	Output +15V, 0.4A / -15V 0.4A 12W	34.11
PS9Z-6RM5	Output +12V, 0.5A / -12V, 0.5A, 12W	33.05
PS9Z-6RM6	Output +12V, 0.5A / -12V, 0.5A, 12W	38.04

Visit our website at www.ilecsys.co.uk or scan QR code for further technical information



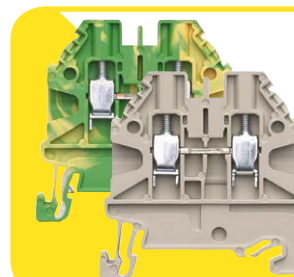
wienet Ethernet Switches (Fast Ethernet) 9 - 30VDC Operating Voltage

REF NO	Description	PRICE
83.040.0000.0	UMS 6 - 6 RJ45 Ports - Ethernet and Fast Ethernet (10/100) Store and forward switching mode, Autocrossing, Autonegotiation, Autosensing, Autopolarity Aluminium Housing - DIN Rail or Screw Mounting 91mmH x 45mmW x 80mmD	136.97
83.040.0000.1	UMS 6-L - 6 RJ45 Ports - Ethernet and Fast Ethernet (10/100) Store and forward switching mode, Autocrossing, Autonegotiation, Autosensing, Autopolarity Plastic Housing - DIN Rail or Screw Mounting 91mmH x 45mmW x 80mmD	112.04
83.040.0001.0	UMS 8 - 8 RJ45 Ports - Ethernet and Fast Ethernet (10/100) Store and forward switching mode, Autocrossing, Autonegotiation, Autosensing, Autopolarity Aluminium Housing - DIN Rail or Screw Mounting 91mmH x 45mmW x 80mmD	186.77



83.040.0000.0

contacts are green.



WT Terminals
wieland

See pages 348-349

Ethernet switches have become common for safe networking and coupling between machines or as part of the system. They manage the data flow in an effective and target orientated manner. Benefits include:

- Redundant Power Supply
- Compact and Robust DIN Rail mounting design
- Compatibility according to IEEE 802.3
- Complete diagnostics display via LED's
- Short Circuit Protection



1240900000

Weidmüller

Weidmuller BasicLine Unmanaged Switches AC/DC Versions - IP30

REF NO	Description	PRICE
1240840000	IE-SW-BL05-5TX - 5 RJ45 Ports - Network Switch, Unmanaged, Fast Ethernet Store and forward switching mode, IEEE 802.3 x flow control, Back pressure flow control Aluminium Housing - DIN Rail Mounting 115mmH x 30mmW x 70mmD	76.16
1240900000	IE-SW-BL08-8TX - 8 RJ45 Ports - Network switch, Unmanaged, Fast Ethernet Store and forward switching mode, IEEE 802.3 x flow control Back pressure flow control Aluminium Housing - DIN Rail Mounting 115mmH x 50mmW x 70mmD	107.52

wieland

Eaton's LS-Titan position switches are quick and easy to install, highly flexible and safe. IP66 rated, the LS-Titan range is available in two versions: For normal operating conditions in corrosive environments, or in the food industry, the LS versions have a totally insulated housing, whereas the LSM versions in their robust metal enclosures are suited to mechanically harsher environments.

All devices are actuated mechanically and, with their positively opening and interlocked opposing contacts, are suitable for use in safe circuits. A unique feature is the ability to combine LS-Titan with pushbutton actuators, selector switches or Emergency-Stop buttons from the RMQ-Titan range. These can simply be snapped on to act as the operating head of the switch.

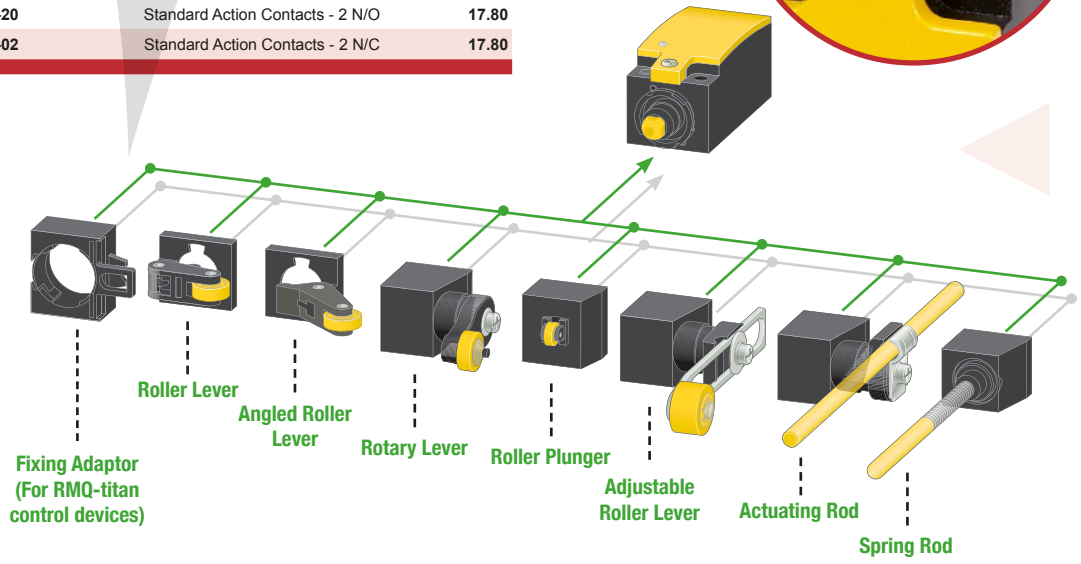


Metal Enclosed Units - Rounded Plunger IP66 - With Cage Clamp Terminals

REF NO	Description	PRICE
LSM-11	Standard Action Contacts - 1 N/O, 1 N/C	22.28
LSM-11D	Make Before Break Contacts - 1 N/O, 1 N/C	22.28
LSM-11S	Snap Action Contacts - 1 N/O, 1 N/C	22.28
LSM-20	Standard Action Contacts - 2 N/O	22.28
LSM-02	Standard Action Contacts - 2 N/C	22.28

Insulated Enclosed Units - Rounded Plunger IP66 - With Cage Clamp Terminals

REF NO	Description	PRICE
LS-11	Standard Action Contacts - 1 N/O, 1 N/C	17.80
LS-11D	Make Before Break Contacts - 1 N/O, 1 N/C	17.80
LS-11S	Snap Action Contacts - 1 N/O, 1 N/C	17.80
LS-20	Standard Action Contacts - 2 N/O	17.80
LS-02	Standard Action Contacts - 2 N/C	17.80



LS-Titan Operating Heads

REF NO	Description	PRICE
Insulated Version		
M22-LS	Fixing Adaptor	1.38
LS-XL	Roller Lever	4.48
LS-XLA	Angled Roller Lever	4.48
LS-XP	Roller Plunger	4.48
LS-XRL	Rotary Lever	8.90
LS-XRLA	Adjustable Roller Lever (D = 18mm)	8.90
LS-XRR	Actuating Road (Insulated)	8.90
LS-XS	Spring Rod (use with snap-action contact only)	8.90
Metal Version		
LSM-XL	Roller Lever	5.56
LSM-XLA	Angled Roller Lever	5.56
LSM-XP	Roller Plunger	5.56
LSM-XRL	Rotary Lever	11.11
LSM-XRLA	Adjustable Roller Lever (D = 18mm)	11.11
LSM-XRRM	Actuating Road (Metal)	11.11
LSM-XS	Spring Rod (use with snap-action contact only)	11.11



LS-XS



LSM-XL



LSM-XLA



LSM-XP



LS-XL



LS-XLA



LSM-XRL



LSM-XRLA



LS-XP



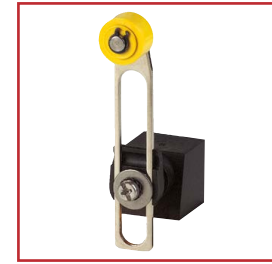
LS-XRL



LSM-XRRM



LSM-XS



LS-XRLA



LS-XRR

RMQ Titan
22.5mm Control Units
See Pages 278-281
EATON

Wieland offer a variety of Safety Relays to monitor safety sensors such as emergency stop buttons, safety gate switches, light barriers, two hand application devices etc.



SNO4003K

Emergency Stop Safety Relay SNO4003K

The SAMOS® SNA4003K is a single channel switching device for emergency stop applications with self-monitoring on each ON-OFF cycle. It complies with EN 60204-1 and is equipped with forcibly guided relays.

- Features**
- Stop Category 0 according to EN60204-1
 - Single channel or two channel control
 - Manual or Automatic start
 - 3 enabling current paths/ 1 signalling current path
 - Feedback loop for monitoring

- Applications**
- Protection of people and machinery
 - Monitoring of emergency stop applications
 - Monitoring of safety gates
 - Up to PL d/category 2 (EN ISO 13849-1)*
 - Up to SIL_{CL} 3 (EN62061)*

* Specific applications may also require higher categories/levels

REF NO	Description	PRICE
R1.188.0500.1	SNO4003K-A 24V AC/DC Screw Terminals - Pluggable	114.70
R1.188.0900.1	SNO4003K-A 115-120VAC Screw Terminals - Pluggable	124.69
R1.188.0910.1	SNO4003K-A 230VAC Screw Terminals - Pluggable	124.69
R1.188.1990.0	SNO4003K-C 24V AC/DC Cage Clamp Terminals - Pluggable	112.36

Safety Relay SNZ4052K

The SAMOS® SNZ4052K is a evaluation device for two-hand actuators and safety gate monitoring.

The device complies with EN574 Type III C safety requirements. The safety behaviour of the device is designed for applications according to category 4 EN954-1. It is single fault safe and self-monitoring. Synchronous activation of both actuators two-hand momentary contact or safety gate with a NO contact and NC contact. The technical design of the input circuit provides cross connection and ground fault monitoring. The output function is designed with 2 NO contacts as an enabling current path and 1 NC contact as signalling current path (all positively driven)

- Features**
- Basic device according to DIN EN574-1, IEC 204-1 & EN954-1
 - Stop category 0 according to EN60204-1
 - Applications up to safety category 2 according to EN654-1
 - Two-channel actuation. 1 NO contact and 1 NC contact for each channel
 - Cross Monitoring
 - Monitoring of synchronous activation
 - 2 enabling current paths, 1 signalling current path

- Applications**
- Protection of operating personnel from danger caused by movable parts
 - For immediate interruption of the power supply - Stop category 0
 - Monitoring of two-hand applications
 - Monitoring of Safety Gates
 - Protection of people and machinery

REF NO	Description	PRICE
R1.188.0530.1	SNZ4052K-A Two-Hand Emergency Stop Relay 24V AC/DC	138.56
R1.188.0940.1	SNZ4052K-A Two-Hand Emergency Stop Relay 115V AC	142.25
R1.188.0950.1	SNZ4052K-A Two-Hand Emergency Stop Relay 230V AC	142.25



SNZ4052K



SNV4076SL

Safety Relay SNV4074SL/SNV4076SL

The SAMOS® SNV4074SL and SNV4076SL are safety switching devices with a timer function. They are suitable for all applications that require a safe timing sequence. They have an application-orientate design and meet all requirements of the currently valid safety standards EN62061 and EN ISO13849-1

- Features**
- Safe OFF-delay
 - Up to 4 instantaneous contacts and 4 time contacts
 - With/without restart inhibit
 - Supply voltage of 24V DC to 230V AC
 - SNV4074SL has 2 N/O Safety & 2 N/C instantaneous contacts and 2 N/O & 2 N/C Off delay contacts
 - SNV4076SL has 3 N/O Safety & 1 N/C instantaneous contact and 2 N/O Off delay contacts

- Applications**
- Mechanical engineering
 - Controlled stop of drives
 - Process industry

REF NO	Description	PRICE
R1.188.2160.0	SNV4074SL 24V DC, 30s Timer	286.92
R1.188.2040.0	SNV4076SL 24V DC, 3s Timer	286.92
R1.188.2070.0	SNV4076SL 24V DC, 30s Timer	286.92

The SNV4074SL and SNV4076SL models have a safe OFF- delay timer function. Other models in the range include OFF-delay with retriggering and safe ON-delay. For these models please contact us for further information.

Universal Safety Relay SNO 4083KM

The SAMOS® SNO 4083KM is universal relay suitable for many applications. The two-channel control of the device is carried out by either an NC/NC or an NC/NO combination of the safety sensor. In the case of two-channel control of the device, a synchronous time is automatically monitored between the two channels. This device also features SafeStart and Monoflop functions, as well as simple diagnosis indication

- Features**
- Stop Category 0 according to EN 60204-1
 - Single-channel or two-channel control
 - Two-channel control with NC/NC or NC/NO
 - Manual or automatic start
 - SafeStart
 - Cross monitoring
 - Synchronous time monitoring for two-channel control
 - 3 enabling current path / 1 signalling current path

- Applications**
- Protection of people and machinery
 - Monitoring of emergency stop applications
 - Monitoring of safety gates
 - Monitoring of light barriers
 - Up to PL e / Category 4 (EN ISO 13849-1)
 - Up to SILCL 3 (EN 62061)

REF NO	Description	PRICE
R1.188.3580.0	SNO4083KM-A Universal Relay, Synchr. Time 1.5s, 24V DC - Pluggable	176.93
R1.188.3590.0	SNO4083KM-A Universal Relay, Synchr. Time 1.5s, 115-230V AC - Pluggable	191.47
R1.188.3830.0	SNO4083KM-A Universal Relay, Synchr. Time 0.5s, 24V DC - Pluggable	162.35
R1.188.3840.0	SNO4083KM-A Universal Relay, Synchr. Time 0.5s, 2115-230V AC - Pluggable	175.71



SNO4083KM

Contact Expansion Relay SNE 4004K

The SAMOS® SNE4004K is an output expansion module with relay for basic devices in safety applications.

REF NO	Description	PRICE
R1.188.0590.0	SNE4004K-A Contact Expansion Relay 24V AC/DC - Pluggable	134.68

The Power XL DE1 range offers a compact, space-saving design that bridges the gap between a standard electromechanical starter and a variable frequency drive. The PowerXL DE1 offers 14 basic parameters, SmartWire-DT, and an intuitive configuration module. Conforms to IEC 61800-5-1, CE, UL, CSA, cTick, UKRSekpro, GOST R, RoHS compliant.

Eaton PowerXL Variable Speed Starter 220-240V

REF NO	Motor kW	Input phases	Output Current	PRICE
DE1-121D4FN-N20N	0.25	1	1.4	96.66
DE1-122D3FN-N20N	0.37	1	2.3	104.45
DE1-122D7FN-N20N	0.55	1	2.7	117.94
DE1-124D3FN-N20N	0.75	1	4.3	120.83
DE1-127D0FN-N20N	1.5	1	7.0	180.05
DE1-129D6FN-N20N	2.2	1	9.6	206.58

DE1-121D4FN-N20N



DE1-345D0FN-N20N



Accessories

REF NO	Description	PRICE
DXE-EXT-SET	DE1 parameterization module	53.85
DX-KEY-LED2	Remote display IP54	72.38
DX-COM-STICK3-KIT	Bluetooth Communication Stick	123.60



DXE-EXT-SET



DX-KEY-LED2

Eaton PowerXL Variable Speed Starter 400-480V

REF NO	Motor kW	Input phases	Output Current	PRICE
DE1-341D3FN-N20N	0.37	3	1.3	187.02
DE1-342D1FN-N20N	0.75	3	2.1	206.67
DE1-343D6FN-N20N	1.5	3	3.6	237.95
DE1-345D0FN-N20N	2.2	3	5.0	272.94
DE1-346D6FN-N20N	3.0	3	6.6	288.03
DE1-348D5FN-N20N	4.0	3	8.5	300.22
DE1-34011FN-N20N	5.5	3	11.3	368.17
DE1-34016FN-N20N	7.5	3	16.0	487.03

Eaton PowerXL Variable Frequency Drives 230V

REF NO	Motor kW	Input phases	Output Current	PRICE
DC1-122D3FN-A20CE1	0.37	1	2.3	169.03
DC1-124D3FN-A20CE1	0.75	1	4.3	198.23
DC1-127D0FN-A20CE1	1.5	1	7	240.47
DC1-12011FB-A20CE1	2.2	1	10.5	316.67

DC1-12011FB-A20CE1



Accessories

REF NO	Description	PRICE
DX-KEY-LED2	Remote Display IP54	72.38
DX-KEY-OLED	OLED Remote Display IP54	130.81
DX-COM-STICK3-KIT	Bluetooth Communication Stick	123.60



DX-KEY-OLED

DX-COM-STICK



The DC1 range of compact variable frequency drives are ideal for fans, pumps and conveyor systems. All models come with a 7-digit display assembly and are available with an integrated EMC filter and an integrated braking transistor. Plug-in modules can be used to expand the number of relay Inputs/Outputs. They have an Integrated PI controller. Conforms to CE, UL, cUL, c-Tick, RoHS, GOST-R (UkrSEPRO).

Eaton PowerXL Variable Frequency Drives 400V

REF NO	Motor kW	Input phases	Output Current	PRICE
DC1-342D2FN-A20CE1	0.75	3	2.2	307.96
DC1-344D1FN-A20CE1	1.5	3	4.1	325.66
DC1-345D8FB-A20CE1	2.2	3	5.8	366.13
DC1-349D5FB-A20CE1	4	3	9.5	419.63
DC1-34014FB-A20CE1	5.5	3	14	540.35
DC1-34018FB-A20CE1	7.5	3	18	639.65
DC1-34024FB-A20CE1	11	3	24	813.06
DC1-34030FB-A20CE1	15	3	30	1018.33
DC1-34039FB-A20CE1	18.5	3	39	1095.48
DC1-34046FB-A20CE1	22	3	46	1527.50

DC1-34046FB-A20CE1



The Altistart 01 Soft Starter which complies with IEC/EN60947-4-2 operates either as a torque limiter on starting, or as a soft start/stop unit for asynchronous motors controlling conveyors, pumps, fans, compressors, automatic doors and gater, small cranes, belt-driver machinery, etc. It is compact, easy to install and can be mounted side by side. The co-ordinated range covers 0.37 - 15kW and functions include start-up voltage boost, start complete, acceleration and deceleration. There are single phase and 3 phase models and a version which can be used with the TeSys U motor starter controller.

The Altistart 22 range of compact soft start/soft stop units are suitable for pumps, fans, turbines, compressors, conveyors, lifting screws, escalators, etc, covering a range from 4 - 315kW. The range has an integrated bypass function for controlled starting and stopping, using both voltage and torque, of three-phase squirrel cage asynchronous motors. Integrated Modbus communication. Conforms to IEC/EN 60947-4-2, class A EMC, CE, UL, CSA, C-Tick, GOST, CCC, ABS.

Altistart 01 Soft Start for Single Phase 110-230V or Three Phase 110-480V Supply

REF NO	230V kW	400V kW	Nominal Current	PRICE
ATS01N103FT	0.37	1.1	3A	141.00
ATS01N106FT	0.75	2.2	6A	145.00
ATS01N109FT	1.1	4	9A	151.00
ATS01N112FT	1.5	5.5	12A	156.00
ATS01N125FT	2.2	7.5	25A	176.00



ATS01N10*FT

Altistart 22 Soft Start for Three Phase 230-440V Supply

REF NO	230V kW	400V kW	440V kW	Nominal Current	PRICE
ATS22D17Q	4	7.5	7.5	17A	360.00
ATS22D32Q	7.5	15	15	32A	436.00
ATS22D47Q	11	22	22	47A	509.00
ATS22D62Q	15	30	30	62A	538.00
ATS22D75Q	18.5	37	37	75A	565.00
ATS22D88Q	22	45	45	88A	723.00
ATS22C11Q	30	55	55	110A	931.00
ATS22C14Q	37	75	75	140A	1119.00
ATS22C17Q	45	90	90	170A	1437.00
ATS22C21Q	55	110	110	210A	1509.00
ATS22C25Q	75	132	132	250A	1622.00
ATS22C32Q	90	160	160	320A	1763.00
ATS22C41Q	110	220	220	410A	2062.00
ATS22C48Q	132	250	250	480A	3268.00
ATS22C59Q	160	315	315	590A	3440.00



ATS22***Q

Altistart 01 Soft Start for Three Phase 380 - 415V

REF NO	3 Phase Supply 380 - 415V	Nominal Current	PRICE
ATS01N206QN	2.2kW @ 400V	6A	152.00
ATS01N209QN	4W @ 400V	9A	166.00
ATS01N212QN	5.5kW @ 400V	12A	190.00
ATS01N222QN	11kW @ 400V	22A	211.00
ATS01N232QN	15kW @ 400V	32A	264.00

For more information on the Altistart 01 Soft Starts, scan the QR code

For more information on the Altistart 22 Soft Starts, scan the QR code



ATS48D75Q

The Altistart 48 soft start/soft stop unit offers controlled torque, prevention of pressure surges and limiting of temperature rises. It protects the motor and starter offering thermal protection, phase loss detection and locked rotor detection. It is suitable for applications such as pumps, high inertia fans and machines, compressors, conveyors, agitators, mixers, escalators, etc. The range extends from 4 to 1200kW. They have integrated Modbus communication with optional DeviceNet, Fiplo, PROFIBUS DP and Ethernet.

- EMC Class A on all starters; Class B up to 170A
- Analog Inputs - 1 x PTC Probe
- 4 Logic Inputs, 2 of which are configurable
- 2 Configurable Logic Outputs
- 3 Relay Outputs, 2 of which are configurable
- 1 x Analog Output
- Remote keypad mounting
- Global Standards - IEC, CE, UL, NOM, C-Tick, GOST, CCIB & CSA

Altistart 48 Softstart

REF NO	Motor Rating - Normal Duty			Motor Rating - Heavy Duty			Dimensions(mm)			Weight	PRICE		
	230V kW	400V kW	Nominal Current	230V kW	400V kW	Nominal Current	H	W	D				
ATS48D17Q	4	7.5	17A	3	5.5	12A	275	x	160	x	190	4.9kg	572.00
ATS48D22Q	5.5	11	22A	4	7.5	17A	275	x	160	x	190	4.9kg	645.00
ATS48D32Q	7.5	15	32A	5.5	11	22A	275	x	160	x	190	4.9kg	678.00
ATS48D38Q	9	18.5	38A	7.5	15	32A	275	x	160	x	190	4.9kg	755.00
ATS48D47Q	11	22	47A	9	18.5	38A	275	x	160	x	190	4.9kg	791.00
ATS48D62Q	15	30	62A	11	22	47A	290	x	190	x	235	8.3kg	836.00
ATS48D75Q	18.5	37	75A	15	30	62A	290	x	190	x	235	8.3kg	879.00
ATS48D88Q	22	45	88A	18.5	37	75A	290	x	190	x	235	8.3kg	1124.00
ATS48C11Q	30	55	110A	22	45	88A	290	x	190	x	235	8.3kg	1201.00
ATS48C14Q	37	75	140A	30	55	110A	340	x	200	x	265	12.4kg	1439.00
ATS48C17Q	45	90	170A	37	75	140A	340	x	200	x	265	12.4kg	1848.00
ATS48C21Q	55	110	210A	45	90	170A	380	x	320	x	265	18.2kg	1941.00
ATS48C25Q	75	132	250A	55	110	210A	380	x	320	x	265	18.2kg	2035.00
ATS48C32Q	90	160	320A	75	132	250A	380	x	320	x	265	18.2kg	2212.00
ATS48C41Q	110	220	410A	90	160	320A	670	x	400	x	300	51.4kg	2656.00
ATS48C48Q	132	250	480A	110	220	410A	670	x	400	x	300	51.4kg	4204.00
ATS48C59Q	160	315	590A	132	250	480A	670	x	400	x	300	51.4kg	4426.00
ATS48C66Q	-	355	660A	160	315	590A	670	x	400	x	300	51.4kg	5865.00

Visit our website at www.ilecsys.co.uk or scan QR code for further technical information

The Altivar 212 is a dedicated HVAC variable speed drive for pumps, fans and compressors covering a range of 0.75 - 75kW. Due to its eco-energy based design, energy savings of up to 70% can be achieved compared to a traditional control system.

- Integrated EMC filter on 380 - 480V models.
- Integrated communication bus: Modbus, METASYS N2, APOGEE FLN P1, BACnet.
- Optional: LonWorks
- Conforms to international standard UL, CSA, C-Tick and NOM
- Antiharmonic technology enables THDI < 30%



Altivar 212 - Three Phase Input 208-240V 50/60Hz - IP20

REF NO	Motor Rating	Rated Output Current at 240V	Weight	PRICE
ATV212H075M3X	0.75kW	4.6A	1.8kg	302.00
	143mmH x 105mmW x 150mmD			
ATV212HU15M3X	1.5kW	7.5A	1.8kg	355.00
	143mmH x 105mmW x 150mmD			
ATV212HU22M3X	2.2kW	10.6A	1.8kg	408.00
	143mmH x 105mmW x 150mmD			
ATV212HU30M3X	3kW	13.7A	3.05kg	546.00
	184mmH x 140mmW x 150mmD			
ATV212HU40M3X	4kW	18.7A	3.05kg	597.00
	184mmH x 140mmW x 150mmD			
ATV212HU55M3X	5.5kW	24.2A	6.1kg	673.00
	232mmH x 180mmW x 170mmD			
ATV212HU75M3X	7.5kW	32A	6.1kg	876.00
	232mmH x 180mmW x 170mmD			
ATV212HD11M3X	11kW	46.2A	11.55kg	1085.00
	330mmH x 245mmW x 190mmD			
ATV212HD15M3X	15kW	61A	11.55kg	1373.00
	330mmH x 245mmW x 190mmD			
ATV212HD18M3X	18.5kW	74.8A	11.55kg	1673.00
	330mmH x 245mmW x 190mmD			
ATV212HD22M3X	22kW	88A	27.4kg	1877.00
	420mmH x 240mmW x 213mmD			
ATV212HD30M3X	30kW	117A	38.65kg	2118.00
	630mmH x 320mmW x 290mmD			

Altivar 212 with Integrated Category C2 or C3 EMC Filter - Three Phase Input 380-480V 50/60Hz - IP20

REF NO	Motor Rating	Rated Output Current at 380V	Weight	PRICE
ATV212H075N4	0.75kW	2.2A	2kg	439.00
	143mmH x 105mmW x 150mmD			
ATV212HU15N4	1.5kW	3.7A	2kg	517.00
	143mmH x 105mmW x 150mmD			
ATV212HU22N4	2.2kW	5.1A	2kg	596.00
	143mmH x 105mmW x 150mmD			
ATV212HU30N4	3kW	7.2A	3.35kg	665.00
	184mmH x 140mmW x 150mmD			
ATV212HU40N4	4kW	9.1A	3.35kg	709.00
	184mmH x 140mmW x 150mmD			
ATV212HU55N4	5.5kW	12A	3.35kg	797.00
	184mmH x 140mmW x 150mmD			
ATV212HU75N4	7.5kW	16A	6.45kg	973.00
	232mmH x 180mmW x 170mmD			
ATV212HD11N4	11kW	22.5A	6.45kg	1206.00
	232mmH x 180mmW x 170mmD			
ATV212HD15N4	15kW	30.5A	11.65kg	1528.00
	330mmH x 245mmW x 190mmD			
ATV212HD18N4	18.5kW	37A	11.65kg	1863.00
	330mmH x 245mmW x 190mmD			
ATV212HD22N4S	22kW	43.5A	11.65kg	2166.00
	Slim Version 330mmH x 245mmW x 190mmD			
ATV212HD22N4	22kW	43.5A	26.4kg	2166.00
	420mmH x 240mmW x 213mmD			
ATV212HD30N4	30kW	58.5A	26.4kg	2645.00
	420mmH x 240mmW x 213mmD			
ATV212HD37N4	37kW	79A	38.1kg	3251.00
	550mmH x 240mmW x 244mmD			
ATV212HD45N4	45kW	94A	38.4kg	3908.00
	550mmH x 240mmW x 244mmD			
ATV212HD55N4	55kW	116A	55.4kg	4994.00
	605mmH x 320mmW x 290mmD			



ATV212WU55N4

Altivar 212 with Integrated Category C2 or C3 EMC Filter - Three Phase Input 380-480V 50/60Hz - IP55

REF NO	Motor Rating	Rated Output Current at 380V	Weight	PRICE
ATV212W075N4	0.75kW	2.2A	7kg	468.00
	297mmH x 215mmW x 192mmD			
ATV212WU15N4	1.5kW	3.7A	7kg	523.00
	297mmH x 215mmW x 192mmD			
ATV212WU22N4	2.2kW	5.1A	7kg	617.00
	297mmH x 215mmW x 192mmD			
ATV212WU30N4	3kW	7.2A	9.65kg	677.00
	340mmH x 230mmW x 208mmD			
ATV212WU40N4	4kW	9.1A	9.65kg	716.00
	340mmH x 230mmW x 208mmD			
ATV212WU55N4	5.5kW	12A	9.65kg	846.00
	340mmH x 230mmW x 208mmD			
ATV212WU75N4	7.5kW	16A	9.65kg	1044.00
	340mmH x 230mmW x 208mmD			
ATV212WD11N4	11kW	22.5A	30.3kg	1362.00
	560mmH x 290mmW x 315mmD			

Altivar 212 with Integrated Category C2 or C3 EMC Filter - Three Phase Input 380-480V 50/60Hz - IP55

REF NO	Motor Rating	Rated Output Current at 380V	Weight	PRICE
ATV212WD15N4	15kW	30.5A	30.3kg	1786.00
	560mmH x 290mmW x 315mmD			
ATV212WD18N4	18.5kW	37A	37.4kg	2207.00
	665mmH x 310mmW x 315mmD			
ATV212WD22N4	22kW	43.5A	49.5kg	2466.00
	720mmH x 284mmW x 315mmD			
ATV212WD30N4	30kW	58.5A	49.5kg	2854.00
	720mmH x 284mmW x 315mmD			
ATV212WD37N4	37kW	79A	57.4kg	3435.00
	880mmH x 284mmW x 343mmD			
ATV212WD45N4	45kW	94A	57.4kg	4192.00
	880mmH x 284mmW x 343mmD			
ATV212WD55N4	55kW	116A	61.9kg	5304.00
	1000mmH x 362mmW x 364mmD			
ATV212WD75N4	75kW	160A	61.9kg	6712.00
	1000mmH x 362mmW x 364mmD			

Drive Software

REF NO	Description	PRICE
VW3A8104	This is the older Powersuite software which will connect to older drives including ATS48, ATV58, ATV38, ATV28. It was also connect to ATV312, ATV61 & ATV71	158.00
VW3A8106	Serial to RJ45 Programming Lead	34.00
SOMOVE Lite	This software is a free download from the Schneider Electric site which will connect to the newer drives including ATV12, ATV312, ATV32, ATV320, ATV61, ATV71, LXM32 and ATS22 Softstarts	Free
TCSMCNAM3M002P	USB to RJ45 Programming Lead	36.00
PC Soft	This software is a free download from the Schneider Electric site which will connect to the ATV21 and ATV212 drives.	Free

Visit our website at www.ilecsys.co.uk or scan QR code for further technical information

To download drives software please go to www.schneider-electric.com

SoMove is available as a free download. Simple, time-saving and user-friendly, it makes it easy to configure Schneider Electric motor control devices. To facilitate setup and maintenance, SoMove software can use a direct USB/RJ45 cable link or a Bluetooth® wireless link.



Eaton's market leading range of easy intelligent relays brings timers, relays, inputs and outputs into one compact device that can be easily configured, providing unprecedented levels of flexibility together with considerable savings in commissioning time.

- Comprehensive range from stand-alone units with a few timing relays and a time switch to networked applications with hundreds of I/O and connection to the MFD IP65 panel display
- Simple circuit diagram entry on the easy unit itself or via the EASY-SOFT drag & drop software
- Program download to plug-in EPROM memory module. Instant programming of other similar applications or simple secure back up for critical processes.
- Expansion and networking - link up to eight easy control relays via EASY-NET



easy 500 Control Relays - No Display

REF NO	Description	PRICE
EASY512-AC-RCX	8 Digital Inputs; 4 Relay Outputs 110/240V AC; Real time clock	109.31
EASY512-AB-RCX	8 Digital Inputs - 2 Usable as analogue; 4 Relay Outputs; 24VAC; Real time clock	109.31
EASY512-DA-RCX	8 Digital Inputs - 2 Usable as analogue; 4 Relay Outputs; 24VDC	109.31
EASY512-DC-RCX	8 Digital Inputs - 2 Usable as analogue; 4 Relay Outputs; 24VDC; Real time clock	109.31
EASY512-DC-TCX	8 Digital Inputs - 2 Usable as analogue; 4 Transistor Outputs; 24VDC; Real time clock	109.31

easy 500 Control Relays with LCD & Programming Function

REF NO	Description	PRICE
EASY512-AC-R	8 Digital Inputs; 4 Relay Outputs 110/240V AC	122.98
EASY512-AC-RC	8 Digital Inputs; 4 Relay Outputs 110/240V AC; Real time clock	140.95
EASY512-AB-RC	8 Digital Inputs - 2 Usable as analogue; 4 Relay Outputs; 24VAC; Real time clock	140.95
EASY512-DC-R	8 Digital Inputs - 2 Usable as analogue; 4 Relay Outputs; 24VDC	122.98
EASY512-DC-RC	8 Digital Inputs - 2 Usable as analogue; 4 Relay Outputs; 24VDC; Real time clock	140.95
EASY512-DC-TC	8 Digital Inputs - 2 Usable as analogue; 4 Transistor Outputs; 24VDC; Real time clock	122.98



easy 700 Expandable Control Relays with LCD & Programming Function

REF NO	Description	PRICE
EASY719-AC-RC	12 Digital Inputs; 6 Relay Outputs 110/240V AC; Real time clock	196.41
EASY719-AB-RC	12 Digital Inputs - 4 Usable as analogue; 6 Relay Outputs; 24VAC; Real time clock	196.41
EASY719-DC-RC	12 Digital Inputs - 4 Usable as analogue; 6 Relay Outputs; 24VDC; Real time clock	196.41

easy 700 Expandable Control Relays

REF NO	Description	PRICE
EASY719-AC-RCX	12 Digital Inputs; 6 Relay Outputs 110/240V AC; Real time clock	177.62
EASY719-AB-RCX	12 Digital Inputs - 4 Usable as analogue; 6 Relay Outputs; 24VAC; Real time clock	177.62
EASY719-DC-RCX	12 Digital Inputs - 4 Usable as analogue; 6 Relay Outputs; 24VDC; Real time clock	177.62



Expansion Units for easy 700

REF NO	Description	PRICE
EASY618-AC-RE	Expansion Module 12 Inputs; 6 Relay Outputs; 110/240VAC	135.76
EASY618-DC-RE	Expansion Module 12 Inputs; 6 Relay Outputs; 24VDC	135.76
EASY620-DC-TE	Expansion Module 12 Inputs; 8 Transistor Outputs; 24VDC	135.76
EASY410-DC-RE	Expansion Module 6 Inputs; 4 Relay Outputs; 24VDC	102.52
EASY410-DC-TE	Expansion Module 6 Inputs; 4 Transistor Outputs; 24VDC	102.52
EASY202-RE	Expansion Module 2 Relay Outputs	37.97



EASY618-DC-RE

The MDF Titan is a Multi-function 60 x 30mm display in an IP65 housing. The unit is fixed into 2 x 22.5mm holes making it easy to mount whilst maintaining the IP rating. An optional keypad enables control functions to be implemented. Two LEDs on the front of the unit can also be illuminated or flashing to attract attention or indicate machine status.

The back-lit display is capable of displaying graphics, text, data, time, etc. Control and visualisation set-up is simple using the EASY SOFT-PRO.

MFD Multi-Function Display

REF NO	Description	PRICE
MFD-80	Display - graphical backlit screen	99.09
MFD-80-B	Display - graphical backlit screen and keypad	107.61

MFD-80-B



Programming Accessories

REF NO	Description	PRICE
EASY-SOFT-BASIC	For programming easy 500/700	35.89
EASY-SOFT-PRO	For programming easy 500/700/800 and MFD displays	121.29
EASY-M-32K	Memory module for easy 500/700	23.93
EASY-M-256K	Memory module for easy 800 and MFD units	27.36

The easy 800 is the range of expandable networkable relays. For more information on this range please contact us.

Visit our website at www.ilecsys.co.uk or scan QR code for further technical information

The Lovato Kinco Micro PLC is compact in size with excellent performance, suitable for the control of low and medium complexity applications.

It can be efficiently used in diverse fields of industrial, service, private and residential applications due to its variety of functions.



Lovato LRD Control Relay - Base modules

REF NO	Description	PRICE
LRD10RA240	6 Digital Inputs; 4 Relay Outputs; 100 - 240VAC	135.82
LRD12RA024	8 Digital Inputs; 4 Relay Outputs; 24VDC	135.82
LRD12RD024	6 Digital + 2 Digital/Analogue Inputs; 4 Relay Outputs; 24VDC	129.15
LRD12TD024	6 Digital + 2 Digital/Analogue Inputs; 4 Transistor Outputs; 24VDC	125.81
LRD20RA024	12 Digital Inputs; 8 Relay Outputs; 24VAC	190.37
LRD20RA240	12 Digital Inputs; 8 Relay Outputs; 100 - 240VAC	190.37
LRD20RD012	8 Digital + 4 Digital/Analogue Inputs; 8 Relay Outputs; 12VDC	190.37
LRD20RD024	8 Digital + 4 Digital/Analogue Inputs; 8 Relay Outputs; 24VDC	190.37
LRD20TD024	8 Digital + 4 Digital/Analogue Inputs; 8 Transistor Outputs; 24VDC	182.56
Base modules with RS485 onboard.		
LRD20RD024P1	8 Digital + 4 Digital/Analogue Inputs; 8 Relay Outputs; 24VDC	228.28

Expansion Units for LRD Control Relays

REF NO	Description	PRICE
LRE02AD024	2 Analogue Outputs; 24VDC	112.70
LRE04AD024	4 Analogue Inputs; 24VDC	161.40
LRE04PD024	4 PT100 Inputs; 24VDC	180.52
LRE08RA024	4 Digital Inputs; 4 Relay Outputs 24VAC	73.48
LRE08RA240	4 Digital Inputs; 4 Relay Outputs 100 - 240VAC	73.48
LRE08RD024	4 Digital Inputs; 4 Relay Outputs 24VDC	73.48
LRE08TD024	4 Digital Inputs; 4 Transistor Outputs 24VDC	67.90
LREP00	RS485 Modbus-RTU protocol slave communication unit	200.37

LRD Control Relays Starter Kits

REF NO	Description	PRICE
LRDKIT12RA024	LRD starter kit complete with LRD12RA024 base module, LRXSW software and LRXC03 cable	180.37
LRDKIT10RA240	LRD starter kit complete with LRD10RA240 base module, LRXSW software and LRXC03 cable	180.37
LRDKIT12RD024	LRD starter kit complete with LRD12RD024 base module, LRXSW software and LRXC03 cable	173.68



LRDKIT10RA240

Accessories

REF NO	Description	PRICE
LRX1V3D024	Power supply unit 100 - 240VAC/24VDC, 1.3A	65.69
LRXC00	PC (RS232) - LRD programming cable	69.06
LRXC02	PC-LRX P01 programming cable	19.12
LRXC03	PC (USB)-LRD programming cable and LRX P01 (RS232)-LRD direct connection	70.66
LRXM00	Program backup memory	17.84
LRXP01	HMI operator panel; Backlit 192 x 64 Pixel LCD Display, 24VDC, RS232, RS485 (Modbus-RTU Master)	175.87
LRXSW	Programming and supervision software (CD-ROM)	22.29
LRXSWP01	LRX P01 editor software (CD-ROM)	20.05



LRX1V3D024

LRXP01

LRXC03

LRD Control Relays Training/Demo Kits

REF NO	Description	PRICE
LRDDEM12RD024	Training kit complete with LRD12RD024 mounted on inputs/outputs simulation board	520.00
LRDDEM20RD024	Training kit complete with LRD20RD024 mounted on inputs/outputs simulation board	572.00



LRDDEM20RD024

The NEW LRH Widescreen TFT Displays with resistive touchscreen, feature 64K colours, are easy to program and extremely flexible. They can be interfaced with different types of devices, from PLC to any kind of intelligent controller.



HMI Displays & Accessories

These IP66 displays have a Widescreen TFT resistive touchscreen with 64K colours and are LED backlit

3 built-in communication ports: Ethernet, USB, Serial (type RS232-RS485-RS422) configurable via software

REF NO	Description	PRICE
LRHA04	4.3" TFT LCD Display	414.96
LRHA07	7" TFT LCD Display	518.96
LRHA10	10.1" TFT LCD Display	1014.00
Programming software for HMI		
LRHSW01	User licence for LRHSW software (available for download from www.lovatoelectric.com website) valid for 1 station	87.36
LRHSW01CD	CD-ROM with LRHSW programming software, including one LRHSW01 licence	92.03
EXCCAB02	RS485 connection cable for LRH, length 3m	38.99

Automation

Automation

Lovato offer a range of Energy Meters both in single and 3 phase. Both include MID certified versions which is a requirement for where monetary transactions are taking place.



DME D100T1 DME D120T1

Single Phase Energy Meters

DME Single Phase Energy Meters Standard version Class 1 are compliant with IEC/EN62053-21; the MID version Class B are compliant with EN50470-3. They come with terminal covers that can be sealed.

Operational Characteristics

- Nominal Supply Voltage: 220 - 240VAC with an operating limit of 187 - 264VAC
- Direct Connection
- Reactive Energy Measurement and accuracy; class 2 (IEC/EN62053-23)
- Metrological LED with pulse emission for consumption indication
- IP40 to front, IP20 on terminals
- DIN Rail Fixing

REF NO	Description	PRICE
Single Phase Meters - Accuracy Class 1		
DME D100T1	40A Meter, LCD Screen, 1 Pulse Output	39.27
DME D110T1	40A Meter, LCD Screen, Programmable Digital Output	46.03
DME D120T1	63A Meter, Backlit LCD Screen, Programmable Digital Output	56.38
DME D121	63A Meter, Backlit LCD Screen RS485 Interface	77.43
DME D122	63A Meter, Backlit LCD Screen M-Bus Interface	167.93
Single Phase Meters - MID Versions - Accuracy Class B		
DME D100T1 MID	40A Meter - MID Certified, LCD Screen, 1 Pulse Output	60.28
DME D110T1 MID	40A Meter - MID Certified, LCD Screen, Programmable Digital Output	62.50
DME D120T1 MID	63A Meter - MID Certified, Backlit LCD Screen, Programmable Digital Output	63.90
DME D121 MID	63A Meter - MID Certified, Backlit LCD Screen, RS485 Interface	88.32
DME D122 MID	63A Meter - MID Certified, Backlit LCD Screen M-Bus Interface	235.30

Three Phase Energy Meters

DME Three Phase Energy Meters Standard version Class 1 are compliant with IEC/EN62053-21 for direct connection, IEC/EN62053-22 for connection via CT; class 0.5s ; the MID version Class B are compliant with EN50470-3. They come with terminal covers that can be sealed.

Operational Characteristics

- Nominal Supply Voltage: 230VAC (L-N); 400VAC (L-L) with an operating limit of 187 - 264VAC (L-N); 323 - 456VAC (L-L)
- Direct Connection or via CT's options
- Reactive Energy Measurement and accuracy; class 2 (IEC/EN62053-23)
- Metrological LED with pulse emission for consumption indication
- Backlit LCD Screen
- IP40 to front, IP20 on terminals
- DIN Rail Fixing

REF NO	Description	PRICE
Three Phase Meters (with or without neutral) - Accuracy Class 1		
DME D301	80A Meter - Direct Connection, RS485 Interface	150.33
DME D330	80A Meter - Connection via CT's, RS485 Interface	150.33
DME D310T2	80A Meter - Connection via CT's, RS485 Interface This Meter is Expandable	131.55
Three Phase Meters - MID Versions - Accuracy Class B		
DME D301 MID	80A Meter - MID Certified - Direct Connection, RS485 Interface	184.17
DME D330 MID	80A Meter - MID Certified - Connection via CT's, RS485 Interface	180.40
DME D310T2 MID	80A Meter - MID Certified - Connection via CT's, RS485 Interface This Meter is Expandable	150.33



For more information on the Lovato Energy Meters, scan the QR code



A range of Panel Mounted Multi-Meters which are capable of viewing measurements with high accuracy on the wide LCD display, which allows the control fo energy distribution networks.



EXM1001 EXM1030

Expansion Modules for DME D310T2 Energy Meters

REF NO	Description	PRICE
Inputs & Outputs		
EXM1000	2 Digital Inputs and 2 Static Outputs, Opto-Isolated	132.27
EXM1001	2 Opto-isolated Digital Inputs and 2 Relay Outputs rated 5A 250VAC	124.00
Communication Ports		
EXM1010	Opto-Isolated USB Interface	148.10
EXM1012	Opto-Isolated RS485 Interface	138.85
EXM1013	Ethernet Interface with Web Server Function	199.20
EXM1020	Opto-isolated RS485 Interface & 2 Relay Outputs rated 5A 250VAC	POA
EXM1030	Data Storage, Clock-Calendar (RTC) with backup reserve energy for data logging	307.67



EXP1001 EXP1012

Expansion Modules DMG Multi-Meters

REF NO	Description	PRICE
Inputs & Outputs		
EXP1001	4 Opto-Isolated Static Outputs	38.57
EXP1002	2 Digital Inputs & 2 Opto-Isolated Static Outputs	63.48
Communication Ports		
EXP1010	Opto-Isolated USB Interface	95.25
EXP1012	Opto-Isolated RS485 Interface	89.30
EXP1013	Opto-Isolated Ethernet Interface	174.20
EXP1030	Data Storage, Clock-Calendar (RTC) with backup reserve energy for data logging for DMG800	251.30

For more information on the Lovato Expansion Modules, scan the QR code



Three Phase Multi-Meters

The main features include an extended power supply voltage range (100 - 440VAC), high measurement accuracy (+/- 0.5% for voltage current, expandability (using EXP modules) and an LCD interactive interface for simple use.

Operational Characteristics

- Voltage: phase, line & system values
- Current: phase values (neutral current calculated)
- Power: apparent, active and reactive phase and total values
- Power Factor per phase and total
- Frequently of measure voltage value
- HIGH-LOW-AVERAGE value functions for all measurements
- Maximum demand of power and current value
- Voltage and Current asymmetry
- Total harmonic distortion (HD): voltage and current
- Display of voltage and current harmonics up to the 15th order (DMG600-DMG610) 31st Order (DMG800) 63rd Order (DMG900)
- Energy meters for active, reactive, apparent partial and total values, per phase and system values
- Hour Counter for programmable total and parital hours
- Phase active power unbalance
- Compliant with IEC/EN61010-1, IEC/EN61010-2 030, IEC/EN61000-6-3

REF NO	Description	PRICE
DMG600 - DMG610 - Expandable with 1 module		
DMG600	96 x 96mm Panel Mount Meter with 72 x 46mm LCD Display	124.02
DMG610	96 x 96mm Panel Mount Meter with 72 x 46mm LCD Display with built-in RS485 serial port	157.86
DMG800 - DMG900 - Expandable with 4 module		
DMG800	96 x 96mm Panel Mount Meter with 128 x 80 Pixels Graphical LCD Display	224.95
DMG900	96 x 96mm Panel Mount Meter with 128 x 112 Pixels Graphical LCD Touchscreen	754.57

For more information on the Lovato Multimeters, scan the QR code



The Lovato Current Transformers (CT's) are installed in an electrical system to reduce the line current to a secondary value of 5A compatible with the ammeter inputs of the digital multimeters or protection relays.



DM Solid Core Current Transformers

DM CT's are instrument transformers in class 1/0.5 without a primary winding and are normally used for high primary current values starting from 50A. Compliant with IEC/EN61869-2 and IEC/EN61869-1

Operational Characteristics

- Operating Frequency 50-60Hz
- Secondary Output Current - 5A
- Overload Withstand - 120% Ipn
- IEC rated Insulation Voltage - Ui: 720V
- IEC rated short-time Thermal Current - Ith: 40-60 Ipn for 1 second
- IEC rated Dynamic Current Idyn - 2.5 Ith for 1 second
- Insulation (dry type) - Class E
- Faston connections for DM2T, DM3T, Screw for DM0T
- Fix on TS35 DIN Rail or with Screws
- EN Protection - IP30
- Operating Temperature - 25 to +50°C

REF NO	Primary Current Ipn /5(A)	Burden		PRICE
		cl. 0.5 (VA)	cl. 1 (VA)	

For 22mm/0.87" Diameter Cable

DM0T 0050	50	-	1.25	8.92
DM0T 0060	60	-	1.5	8.92
DM0T 0080	80	-	1.5	8.92
DM0T 0100	100	-	1.5	8.92
DM0T 0150	150	-	2	8.92

For 23mm/0.90" Diameter Cable; 30x10mm, 25 x 12.5mm, 20 x 15mm Busbars

DM2T 0100	100	-	1	9.10
DM2T 0150	150	-	1.5	9.10
DM2T 0200	200	-	2	9.10
DM2T 0250	250	-	2.5	9.10
DM2T 0300	300	1.5	3	9.97
DM2T 0400	400	2	3	9.97

For 30mm/01.18" Diameter Cable; 40x10mm, 25 x 30mm, 25 x 25mm Busbars

DM3T 0200	200	-	5	13.87
DM3T 0250	250	-	5	13.87
DM3T 0300	300	2.5	5	17.00
DM3T 0400	400	2.5	5	17.00
DM3T 0500	500	2.5	5	18.97
DM3T 0600	600	5	10	18.97
DM3T 0800	800	5	10	24.27



DM TMA Split Core Current Transformers

DM-TMA CT's are instrument transformers in class 1/0.5 without a primary winding and are normally used for high primary current values starting from 100A. Compliant with IEC/EN61869-2 and IEC/EN61869-1

Operational Characteristics

- Operating Frequency 50-60Hz
- Secondary Output Current - 5A
- Overload Withstand - 120% Ipn
- IEC rated Insulation Voltage - Ui: 720V
- IEC rated short-time Thermal Current - Ith: 40-60 Ipn for 1 second
- IEC rated Dynamic Current Idyn - 2.5 Ith for 1 second
- Insulation (dry type) - Class E
- Cable connections for DM1TMA, DM2TMA
- Screw connection for DM2TA
- Fix with Screws
- EN Protection - IP30
- Operating Temperature - 25 to +50°C

REF NO	Primary Current Ipn /5(A)	Burden		PRICE
		cl. 0.5 (VA)	cl. 1 (VA)	

24 x 24mm/0.94 x 0.94" Hole. Cable Supplied as Standard 1M Length

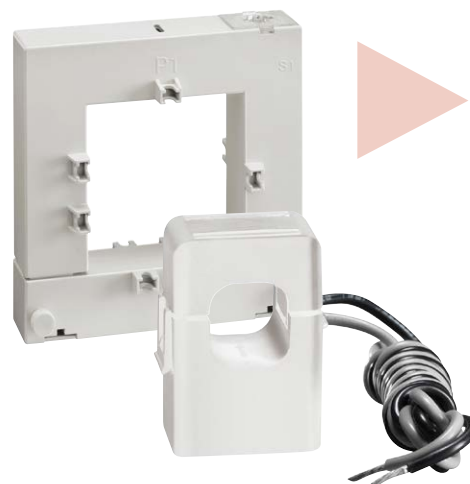
DM1TMA 0100	100	-	1.2	53.93
DM1TMA 0150	150	-	1.2	53.93
DM1TMA 0200	200	-	1.2	53.93
DM1TMA 0250	250	-	1.2	53.93

36 x 38mm/1.42 x 1.50" Hole. Cable Supplied as Standard 1M Length

DM2TMA 0250	250	-	1.5	63.40
DM2TMA 0300	300	-	1.5	63.40
DM2TMA 0400	400	-	1.5	63.40
DM2TMA 0500	500	-	1.5	63.40

50 x 80mm/1.97 x 3.15" Hole. (Cable not supplied)

DM2TA 0250	250	1	2	149.25
DM2TA 0400	400	1.5	3	149.25
DM2TA 0500	500	2.5	5	149.25
DM2TA 0600	600	2.5	5	149.25
DM2TA 0800	800	3	7.5	180.00



CT's with a Primary Current Ipn /5 (A) are available up to 4000A
Please contact us for further information



Efficient energy management is essential to industry as it offers a way to reduce energy usage, identify production costings and improve sustainability.

These objectives are also requirements of management standard EN ISO 50001 and streamlined energy and carbon reporting regulations (SECR) legislation which determines how companies should monitor and report their energy consumption in order to improve energy performance.

In the field of energy monitoring and energy saving, LOVATO Electric offers energy service companies, energy managers, technical offices and maintenance companies a wide range of hardware solutions (multimeters, energy meters, variable speed drives, automatic power factor controllers, etc.) and software (SCADA) to monitor energy supplies like electricity, water, gas and air in a simple and economical manner.

The SYNERGY system offered by LOVATO Electric is based on permanent monitoring and the construction of baselines as starting points for the continuous verification of a plant's energy efficiency. The system permits the implementation of a permanent monitoring plan to ensure the continuous supervision of significant data, the acquisition of useful process information or measurements and the assignment of correct energy weightings to individual products and services.



SPECIAL OFFER!

ONLY **£18.99**
Multifunction NFC time relay
TMM1NFC



Synergy is a Supervision & Energy Management Software. It collects production and consumption data for energy supplies such as electricity, water, gas and air, using hardware measurement equipment which monitors the main parameters and communicates with the management software.



- Communication with all Lovato Electric measurement and control products, via serial, Ethernet or modem ports
- Support for third party devices (water, gas, air measurements)
- Consultation of instantaneous values
- Creation of custom graphic pages
- Date saving and sharing in log files
- Energy Consumption reports
- Graphic display of trends
- Automatic reports in analytical and graphic format
- Alarm management, local and via email
- Energy quality analysis
- Field equipment remote parameter setting
- Access level management

NFC

Programming parameters via a tablet or smartphone is now possible through NFC wireless technology. Bringing a smartphone or tablet with NFC connection enabled close to the Lovato product, activates the NFC APP and the device connected is recognised automatically. The application allows you to set the parameters for the device connected, save the parameters in a file and send via email if desired. It also allows you to load parameters previously saved.

In the case of the TMM1NFC timer, shown here as an example, the functionality and accuracy is greatly enhanced

Free of charge technical advice and assistant is available on all Lovato products. Phone or email us now!!

