

GSM Controller

- Ideal for ON /OFF Switching of load remotely using Mobile Handsets
- Suitable for both 1 Phase and 3 Phase installations
- Flexible antenna positioning to get proper signal strength
- SMS alerts for ON/OFF status, Power fail, Power on, Phase error, Error recovery, Phase fail, Contactor pick-up fault and SIM balance
- Anti-theft protection
- Switching enabled by number of missed rings or sending SMS to the device
- Load can be operated in GSM Auto Mode for automatic operation, Timer Mode or Multiple Daily Timer Mode for specific duration of operation
- One Master & two Monitor numbers can be configured



Ordering Information

Cat. No.	Description
26A11AV	180 - 500 VAC, Module For Mobile Starter with wire type antenna
26A21AV	85 - 265 VAC, Module For Mobile Starter with wire type antenna
26100V0 (Accessory)	Wire type antenna

GSM Controller



Cat. No.

26A11AV

Parameters																													
Supply Voltage (⊕)	180V AC to 500V AC (For Single Phase : Connect Live to R or Y & Neutral to B & COM terminal of Controller)																												
Frequency	50-60 Hz																												
Power Consumption (Max.)	10 VA																												
Initialisation Time	45 Sec																												
Contact Ratings	Terminal 15 & 16 – NC ,Terminal 25 & 28 – NO, 5A @ 250V AC / 30V DC (Res)																												
FUNCTIONAL CHARACTERISTICS :																													
LED Indications	<table border="1"> <thead> <tr> <th>LED</th> <th>INDICATION</th> <th>DEVICE STATUS</th> </tr> </thead> <tbody> <tr> <td>ON (Green)</td> <td>ON</td> <td>Master number configured.</td> </tr> <tr> <td rowspan="2">CFG (Red)</td> <td>Blinking @ 500 m Sec</td> <td>GSM modem in factory default mode</td> </tr> <tr> <td>Flash every 800 m sec</td> <td>GSM modem in configuration mode</td> </tr> <tr> <td rowspan="2">N/W (Green)</td> <td>Flash every 3 sec</td> <td>Not registered with N/W</td> </tr> <tr> <td>Both ON</td> <td>Registered with N/W</td> </tr> <tr> <td rowspan="3">I1 & I2 (Yellow)</td> <td>Both OFF</td> <td>Starter ON</td> </tr> <tr> <td>I1 Blinking @ 500 m Sec</td> <td>Starter OFF</td> </tr> <tr> <td>Both blinking</td> <td>Phase fail</td> </tr> <tr> <td rowspan="2">Tx/Rx (Green)</td> <td>Randomly Blinking</td> <td>Power fail indication till super capacitor back up</td> </tr> <tr> <td>Flash every 400 m Sec</td> <td>Communication between CPU and Modem SIM card not detected</td> </tr> </tbody> </table>	LED	INDICATION	DEVICE STATUS	ON (Green)	ON	Master number configured.	CFG (Red)	Blinking @ 500 m Sec	GSM modem in factory default mode	Flash every 800 m sec	GSM modem in configuration mode	N/W (Green)	Flash every 3 sec	Not registered with N/W	Both ON	Registered with N/W	I1 & I2 (Yellow)	Both OFF	Starter ON	I1 Blinking @ 500 m Sec	Starter OFF	Both blinking	Phase fail	Tx/Rx (Green)	Randomly Blinking	Power fail indication till super capacitor back up	Flash every 400 m Sec	Communication between CPU and Modem SIM card not detected
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GSM Modem	Quad band 850MHz,900MHz / 1800MHz,1900MHz																												
Operating Temperature	0° C to +60° C																												
Storage Temperature	-20° C to +70° C																												
Humidity (Non Condensing)	95% (Rh)																												
Enclosure	Flame Retardant UL94-V0																												
Dimension (W x H x D) (in mm)	72 X 90.5 X 65																												
Weight (unpacked)	220 g approx.																												
Mounting	DIN rail / Base																												
Certification																													
Degree of Protection	IP 20 for Terminals, IP 30 for Enclosure																												

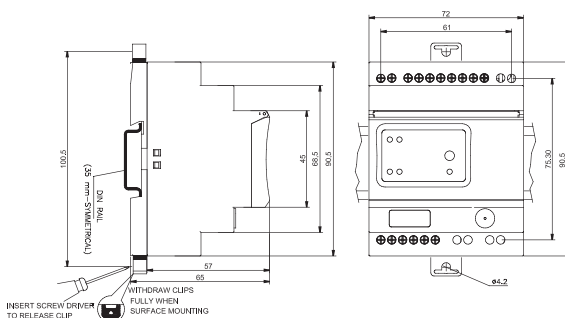
EMI / EMC

Harmonic Current Emissions	IEC 61000-3-2
ESD	IEC 61000-4-2
Radiated Susceptibility	IEC 61000-4-3
Electrical Fast Transients	IEC 61000-4-4
Surges	IEC 61000-4-5
Conducted Susceptibility	IEC 61000-4-6
Voltage Dips & Interruptions (AC)	IEC 61000-4-11
Voltage Dips & Interruptions (DC)	IEC 61000-4-29
Conducted Emission	CISPR 14-1
Radiated Emission	CISPR 14-1

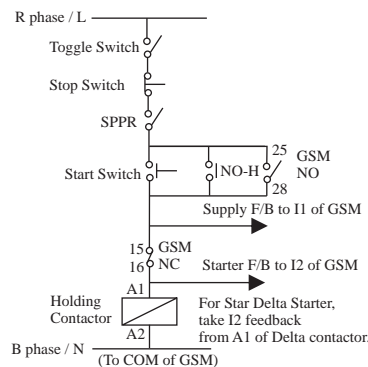
Environmental Compliance

Cold Heat	IEC 60068-2-1
Dry Heat	IEC 60068-2-2
Vibration	IEC 60068-2-6
Repetitive Shock	IEC 60068-2-27
Non-Repetitive Shock	IEC 60068-2-27

MOUNTING DIMENSIONS (mm)



CONNECTION DIAGRAM TERMINAL TORQUE & CAPACITY



	Torque - 0.54 N.m (5 Lb.in)
\varnothing 3.5 mm	Terminal screw - M2.5
	1 x 0.2....1 mm2 Solid Wire Single Wire Ferrule.
	2 x 0.2....1 mm2 Insulated Twin Wire Ferrule.
AWG	1 X 24 to 12

Note: It is strongly recommended to use Single Phasing Protection Device (SPPR) for Motor Protection with GSM Controller

Note: This Product is only available for Sale Outside India



GSM Controller



Configuration Steps

- Step 1 :** Insert SIM card in the slot provided and connect Antenna.
- Step 2 :** Power on device & wait for 45 sec. ON (Green) LED will start blinking, indicating that device is in factory default mode. After every power on ,device will take 45 sec for initialization during which user should wait.
- Step 3 :** Ensure that NW (Network) LED is flashing after every 3 sec. It means device is registered with inserted SIM N/W.If NW LED is blinking faster, it means that the device is not registered with SIM NW & hence not ready for operation.
- Step 4 :** Press the CFG (Configuration) key on the device till CFG (RED) LED starts blinking. The device goes in the configuration mode to configure the master number in the device.
- Step 5 :** CFG LED will blink for 3 min, user should configure the master number within this time.
- Step 6 :** Call the device number, call will be disconnected after 1 to 2 rings.
- Step 7 :** After call gets disconnected, ON LED stops blinking & becomes permanently ON. CFG LED turns OFF. This will indicate that, master number has been configured in the device. User will receive SMS of "Mobile number updated".
- Step 8 :** To configure the monitor numbers if required, send query 55<Space>Mobile no.1<Space>Mobile no.2 from the master number.
- Step 9 :** After installing device for the first time, set the device clock by sending query "16". User will receive SMS," 16, "TIME ALREADY SET" or "16, "TIME SET TO, DT: 15/12/13, TM:10:10:50AM".
- Step 10 :** If device is connected to single phase supply, then configure device for single phase supply by sending query 18<space>1. User will receive SMS - 18, SYSTEM CONFIGURED FOR 1-PHASE SUPPLY.
- Step 11 :** If device is connected in Semi Automatic Star Delta starter then configure the device in SASD system by sending query 77<space>0. User will receive SMS - 77, "SYSTEM CONFIGURED FOR SASD"
- Step 12 :** User should refer the "General SMS Queries" for functional details of the device.

General SMS Queries : (To be sent only from Master number to Device number)

QUERY	DETAILS
Functionality Queries	
Call to device number or send SMS 11<space>0	After 3-4 rings device cuts the call & turns ON the starter or after receiving SMS 11 0 device turns ON the starter.
Call to device number or send SMS 00	After 5-6 rings device cuts the call & turns OFF the starter or after receiving SMS 00 device turns OFF the starter.
11<space>1 to 47	Starter ON with timer. Here 1=30 min, 2=1hr, 3=1.5hrs..... 47=23.50hrs. e.g. 11 4 query will turn on starter for 2 hrs from the time device receives the query.
22<space>ON time1 <space>OFF time1, ON time2<space>OFF time2, ON time3<space>OFF time3, ON time4 <space>OFF time4	1) This query is used to enable daily timer. Daily timer ON & OFF time is in hours and 24 hours format only. 2) User can set minimum one daily timer and maximum four daily timer to operate the starter on daily basis. e.g. 22 18 20 query will enable daily timer from 6PM to 8PM. 3) If user wish to turn ON & OFF the starter at different times on daily basis then he can send the query e.g. 22 8 9,11 12,13 15,16 18 Here Starter will turn ON at 8AM and turn OFF at 9AM, again Starter will turn ON at 11AM and turn OFF at 12AM, then starter will turn ON at 1PM and turn OFF at 3PM and finally starter will turn ON at 4PM and turn OFF at 6PM. 4) If time is overlapped in query then User will receive SMS of "Invalid Parameter". 5) If user wishes to change the time then he has to reconfigure the new time by 22 query. 6) To disable daily timer settings, send query 22<space>0<space>0.
33<space> 0 or 1	0 - Auto Time Update Disable / 1 - Auto Time Update Enable. (Factory default)
66<space> 0 or 1	0 - GSM Auto Mode Disable (Factory default) / 1 - GSM Auto Mode Enable.
88	To know the available balance in prepaid account. (Note: Before sending this query first set the balance code by sending query 14).
99	To know current status of device.
INFO	To know all frequently used queries.
Configuration Queries	
44<space>xxxx (xxxx denotes last four digit of previous master number)	To replace the previous master number with new one, send query 44<space>xxxx from a new number which is to be configured as Master. (Note: 1. Before sending this query first press configuration key on device till CFG LED starts blinking 2. After this query, previously stored Monitoring numbers will be deleted & new monitoring numbers need to be configured)
55<space>First number <space>Second number	For pairing Monitoring numbers. By sending this query Master number can pair 2 monitoring numbers with device. (Note: While entering Monitor numbers, ensure that correct number is entered. Numbers can be verified in response SMS).
55	To remove monitor numbers, send only 55 query to device.
 77<space>0	Starter Configuration - SASD. Send this query if GSM is installed in Semi Automatic Star Delta Starter.
77<space>1	Starter configuration - DOL/FASD (Factory default).
14<space>balance code	Set balance code.Balance code depends on Service provider. e.g. 14 *121# (*121# is balance code).
15<space> 0 or 1	0 - "AUTO BALANCE INFO SMS OFF" / 1-"AUTO BALANCE INFO SMS ON" (Factory default).
 16	To set device clock if there is difference in local time and Device time. Device clock will be set as per time stamp received in SMS.
17	To know configured master & monitor numbers.
18<space>1	To configure the device for single phase supply.
18<space>3	To configure the device for three phase supply (Factory default).
Troubleshooting / Security Queries	
79	To set device in factory default mode. Before sending this query first press configuration key on device till CFG LED starts blinking
12	To check signal quality.
13	To know IMEI number of the device.

NOTE : For monitor numbers only INFO, 12 , 44 & 99 queries are applicable.