

GSM Controller

- Load can be made ON / OFF using mobile phone from remote location either by making an IVRS call, missed call or sending SMS to the device
- Device is suitable for Single Phase and Three Phase supply
- Device is compatible with SASD, FASD & DOL starters and controllers
- One Master and two other Master or Monitor numbers can be configured to control and monitor the Load operation
- Load can be operated in Manual Mode, GSM Auto Mode, Timer Mode, Retentive Timer Mode or Multiple Daily Timer Mode
- Wire antenna for flexible positioning to get proper signal strength
- User can get information of events like Load ON/OFF, Phase error, Error recovery, Power Fail, Power ON, Phase fail, Contactor pick up fault through SMS and call back from device
- Anti-theft feature
- Powered with Android App "M-Remote"



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	LED	INDICATION	DEVICE STATUS
	ON (Green)	ON	Master number configured.
	CFG (Red)	Blinking @ 500 m Sec	GSM modem in factory default mode
		Blinking @ 500 m Sec	GSM modem in configuration mode
	N/W (Green)	Flash every 800 m sec	Not registered with N/W
		Flash every 3 sec	Registered with N/W
	I1 & I2 (Yellow)	Both ON	Starter ON
		Both OFF	Starter OFF
I1 Blinking @ 500 m Sec		Phase fail	
Tx/Rx (Green)	Both blinking	Power fail indication till super capacitor back up	
	Randomly Blinking	Communication between CPU and Modem	
	Flash every 400 m Sec	SIM card not detected	
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		

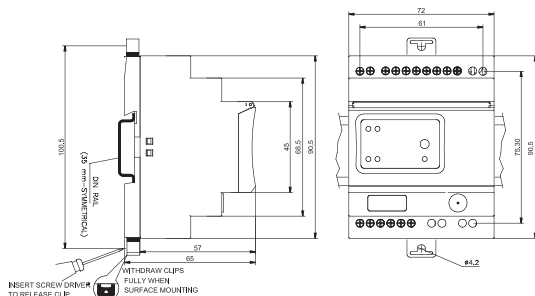
EMI / EMC

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

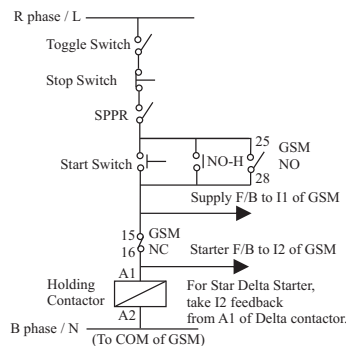
Environmental Compliance

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



	0.54 N.m (6 Lb.in)
	1 x 2.5 mm ² Solid Wire/Stranded
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 50 sec. ON (Green) LED will start blinking*, indicating that device is in factory default mode. After every power on, device will take 50 to 80 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 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 "ROLE : MASTER".
- Step 8 :** To configure other Master 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, "TIME : SET , TM : 14.10.01/12/16".
- 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 - SUPPLY-1 PHASE
- 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 - PANEL : SASD.
- Step 12 :** User should refer the "General SMS Queries" for functional details of the device.
- *Note :** In factory default, ON LED will continuously remain ON for approx. 10 sec till super capacitor charging and then start blinking.

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

SMS QUERY	ACTION
Functional Queries	
Voice Call (IVRS)	When call is made to device, recorded voice guide the User to operate the Load. (Factory set)
Missed Call	If Master number disables Voice call (IVRS) feature by 41<space>0 query, then User can operate the Load by Missed Call mode. When User call device, then device cut the call after 3-4 rings to make Load ON and cut the call after 5-6 rings to make Load OFF.
00	After receiving SMS 00, device turns OFF the Load.
11<space>0	After receiving SMS 11 0, device turns ON the Load.
11<space>HH<space>MM (Timer Mode)	After receiving this query, Load is turned ON in timer mode till specified end time. Here HH indicates Hour and MM indicates Minutes. E.g. after receiving 11 00 30 query, Load is turned ON till next 30 minutes. In Timer mode, error and power fail duration is not compensated. Load can be operated in timer mode from min 1 min to max 23.59 Hrs.
21<space>HH<space>MM (Retentive Timer Mode)	After receiving this query, Load is turned ON in Ret. timer mode for set time. Here HH indicates Hour and MM indicates Minutes. E.g. after receiving 21 00 30 query, Load is turned ON for 30 minutes. In Ret. Timer mode, error and power fail duration is compensated. Load can be operated in Ret. Timer mode from min 1 min to max 23.59 Hrs.
22<space>HH.MM<space>HH.MM (Daily Timer Mode)	After receiving this query, device make Load ON and OFF as per set time on daily basis. Here HH indicates Hour and MM indicates Minutes. Load ON and OFF time can be set in 24 Hrs format only. Master number can set min 1 and max 4 daily timers. E.g. If master send query 22 10.30 12, then device daily make Load ON at 10.30AM and OFF at 12PM. If master want to operate 4 daily timers, then send query e.g. 22 9 11.30, 11.35 13.45, 15 16, 17.30 19 After receiving this query, Load turns ON and OFF 4 times a day as per set time. There should be 1 min difference between 2 daily timers.
22	After receiving this query from Master number, daily timer settings are disabled.
23 (Hour Meter)	After receiving this query, User get to know, for how many hours Load was ON since installation of the device. Only Master number can reset hour meter to zero by sending query 23<space>0.
41<space>0 or 1	0 - To disable Voice call(IVRS) and enable Missed call mode 1 - To enable Voice call(IVRS) and disable Missed call mode (Factory Set)
42<space>0 or 1	0 - To disable Call back from device (Factory Set) / 1 - To enable Call back from device
43<space>0 or 1	0 - To stop receiving Event SMS from Device. / 1 - To start receiving Event SMS from Device. (Factory Set)
66<space>1	To make Load ON in Auto mode.
66<space>0	To make Load OFF only if it is ON in Auto mode.
97	To know System settings.
98	To know daily timer settings.
99	To know current status of Load.
INFO	To know all frequently used queries.
Configuration Queries	
15<space>0, balance codeA	After receiving this query , User get balance information. Balance code need to be correctly set. E.g. 15 0,*121# (*12# is balance code. It changes as per Service provider)
15<space>1, balance codeA	After receiving this query , User get balance information automatically after every 16 to 20th SMS.
16	After receiving this query, Device time will be set as per time of Master's SIM Network.
17	To know configured master & other master / monitor numbers.
18<space>1 or 3	1 -To configure with 1 PH Supply / 3 - To configure with 3 PH Supply (Factory Set).
44<space>xxxx (xxxx indicates 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 other master/monitor numbers will be deleted & new numbers need to be configured)
50<space>X (X is ON delay which ranges from 0 to 5 minutes)	Master number can configure ON delay in the Device by sending query 50.To set ON delay of 30 sec, Master number should send query 50<space>0, similarly 50<space>1 for 1 minute ON delay and upto 5 minutes in multiple of 1 minutes. The default setting of ON delay in the device is 30 sec. ON delay is applied whenever Load is to be turned ON after error or power fail or command off.
55<space>First number<space>Second number	By sending this query Master number can configure 2 other Master numbers with device. Other Master numbers can also turn ON and OFF Load by call or SMS. OR Master number can configure 2 Monitor numbers by suffixing letter M to mobile numbers in 55 query. (e.g 55<space>xxxxxxxxM). Monitor numbers can only receive event SMS from device. To change the numbers, Master can resend 55 query with new numbers which are to be configured. (Note: While entering numbers, ensure that correct number is entered. Numbers can be verified by sending 17 query).
55	To remove other master /monitor numbers, send only 55 query to device from Master number.
77<space>0 or 1	0 -To configure with SASD starter / 1 - To configure with DOL/FASD starter (Factory Set).
Troubleshooting / Security Queries	
12	To check network range
13	To know IMEI number and F/W version of the device.
NOTE : 1) Other Master numbers have access to call and queries 00, 11, 12, 13,17,21,23,44, 66, 97,98, 99 and info.	
2) Monitor numbers have access to queries 12, 13,17,21,23,44, 97,98,99 and info.	