

# GSM Controller

- Ideal for ON /OFF Switching of equipment 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, SIM balance, delivery of error/recovery messages from protection devices
- Switching enabled by number of missed rings or sending SMS to the device
- Option of Auto Mode for automatic operation,
- Daily time switch mode for routine program and timer mode for specific duration of operation



## Cat. No.

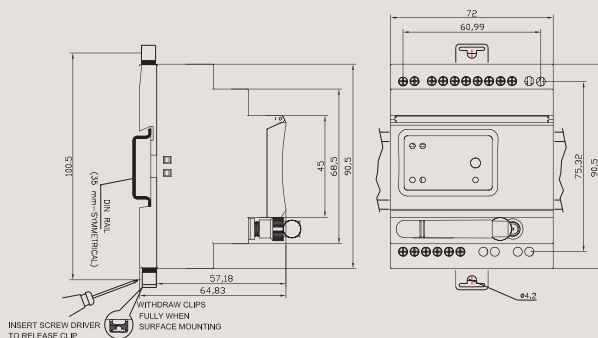
26A11AV

Parameters			
Supply Voltage (⚡)	160V 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.)	8 VA (max) at product ON but in idle condition / 50 VA when call is being made		
Initiate Time / Reset Time	35 Sec / 1 Sec Max. (can be lower during call)		
Contact Ratings	Terminal 15 & 16 – NC ,Terminal 25 & 28 – NO, 5A @ 250V AC / 30V DC (Res)		
<b>FUNCTIONAL CHARACTERISTICS :</b>			
LED Indications	LED	INDICATION	DEVICE STATUS
	ON (Green)	ON Blinking @ 500 m Sec	Master number configured. GSM modem in factory default mode
	CFG (Red)	Blinking @ 500 m Sec	GSM modem in configuration mode
	N/W (Green)	Flash every 800 m sec Flash every 3 sec	Not registered with N/W Registered with N/W
	I1 & I2 (Yellow)	Both ON Either or both OFF	Load ON Load OFF
	Tx/Rx (Green)	Communication between CPU & Modem	
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	IP 30 for Housing & front Facial and IP 20 for Terminals		
Dimension (W x H x D) (in mm)	72 X 90.5 X 65		
Weight (unpacked)	160 g		
Mounting	DIN rail / Base		
Certification			
Degree of Protection	IP 20 for Terminals, IP 30 for Enclosure		
<b>EMI / EMC</b>			
Harmonic Current Emissions	IEC 61000-3-2	Ed. 3.2 (2009-04) Class A	
ESD	IEC 61000-4-2	Ed. 2.0 (2008-12) Level II	
Radiated Susceptibility	IEC 61000-4-3	Ed. 3.2 (2010-04) Level III	
Electrical Fast Transients	IEC 61000-4-4	Ed. 3.0 (2012-04) Level IV	
Surges	IEC 61000-4-5	Ed. 2.0 (2005-11) Level IV	
Conducted Susceptibility	IEC 61000-4-6	Ed. 3.0 (2008-10) Level III	
Voltage Dips & Interruptions (AC)	IEC 61000-4-11	Ed. 2.0 (2004-03) All 7 Levels	
Voltage Dips & Interruptions (DC)	IEC 61000-4-29	Ed. 1.0 (2000-08) All 5 Levels	
Conducted Emission	CISPR 14-1	Ed. 5.2 (20011-11) Class B	
Radiated Emission	CISPR 14-1	Ed. 5.2 (20011-11) Class B	
<b>Environmental</b>			
Cold Heat	IEC 60068-2-1	Ed. 6.0 (2007-03)	
Dry Heat	IEC 60068-2-2	Ed. 5.0 (2007-07)	
Vibration	IEC 60068-2-6	Ed. 7.0 (2007-12) 5g	
Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 40g, 6ms	
Non-Repetitive Shock	IEC 60068-2-27	Ed. 4.0 (2008-02) 30g, 15ms	

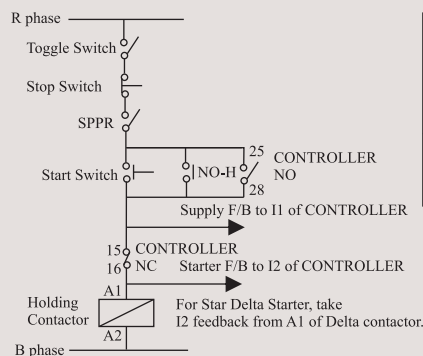
## ORDERING INFORMATION

Cat. No.	Description
26A11AV	160 - 500 VAC, Module For Mobile Starter with wire type antenna
26A21AV	85 - 265 VAC, Module For Mobile Starter with wire type antenna
26100P0 (Accessory)	SIM Card Tray
26100V0 (Accessory)	Wire type antenna

## 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 mm <sup>2</sup> Solid Wire Single Wire Ferrule.
	2 x 0.2...1 mm <sup>2</sup> Insulated Twin Wire Ferrule.
AWG	1 X 24 to 12



## Configuration Steps

- Step 1: Insert SIM in the slot provided.
- Step 2: Power on device & wait for 35sec. ON (Green) LED will start blinking, indicating that device is in factory mode. After every power on, device will take 35 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.
- Step 8: To configure the monitor numbers if required, send query. 55<Space>no. 1<Space>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: 15/12/12 ,TM:10:10:50 AM".
- Step 10: In order to receive balance info between every 16<sup>th</sup> to 20<sup>th</sup> SMS, set the balance code by sending query 14<space>\*121# (\*121# is the example for balance code. Balance code is changed as per Service Provider). User will receive SMS, "14,"BALANCE CODE UPDATED".
- Step 11: If device is connected in Semi Automatic Star Delta (SASD) 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: After completion of above procedure, user should refer the "General SMS Queries" for further operation. Important Note: Whenever DST happens, set the device clock by sending query "16".

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

QUERY	DETAILS
<b>Functionality Queries</b>	
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 GSM receives the query.
22<space>ON time<space>OFF time.	Enable Daily Timer. Here ON & OFF time is in 24Hrs format only. e.g. 22 18 20 query will enable daily timer from 6pm to 8pm or 22 01 02 query will enable daily timer from 1am to 2 am. (Refer clock given below) To disable daily timer mode send same ON & OFF time i.e. 22 00 00.
66<space>1 or 0	GSM Auto mode Enable / Disable (1-Enable, 0- Disable). Factory default disable.
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.
<b>Configuration Queries</b>	
44<space>last four digit of previous master number	For updating master number. To replace the previous master number with new one send query 44 xxxx from a new number which is to be configured as Master. (Note: 1. Before sending this query first press configuration key on device 2. After this query, previously stored Monitoring numbers will be deleted & new monitoring numbers need to be configured )
55<space>10 digit no.<space>10 digit no.	For pairing Monitoring numbers. By sending this query Master number can pair 2 monitoring numbers with device. To remove monitor numbers, send query 55 only.
77<space>0	Starter Configuration – SASD. Factory default disable. Send this query if GSM is installed in Semi Automatic Star Delta Starters.
 77<space>1	Starter configuration – DOL / Fully Automatic Star Delta (FASD). Factory default enable.
14<space>balance code	Set balance code. Balance code depends on Service provider. E.g. 14 *121# (*121# is balance code).
15<space>1 or 0	1-AUTO BAL INFO SMS ON, 0- AUTO BAL INFO SMS OFF. Factory default – AUTO BAL INFO SMS ON
 16	To set device clock.
17	To know configured master & monitor numbers.
<b>Troubleshooting/ Security</b>	
79	To put device in factory default setting provided CFG key is pressed till RED LED on device blinking.
12	To check signal strength.
13	To know IMEI number of the device.

**NOTE : For monitor numbers only INFO, 99 , 16 & 12 queries are applicable.**