Harsen®

Introduction

GU320A

GU320a Controller Introduction

GU320a is a kind of intelligent controller of generator which adopt high grade CMOS chip. It can modify the control procedure and protection parameters of the generator, gather lost of function together, such as measuring, controlling,protection, three remote and so on, can fully satisfied the automatic controlling requirement of different generator sets for the generator user or factory.

- The controller measure and display all parameters which the generator output, and the rotating speed, oil pressure, temperature, DC source voltage, running time of the engine and so. All of the voltage measured in real virtual value to ensure the accuracy of the data.
- Big LCD display, Chinese and Denglish menu selection.
- The keys on the control panel are used to select the control mode, start the running procdure,display data, and modify the running protection parameters, The LED indicates the operating mode of the controller and the running status of the generator sets. LCD display each measured parameter and status.
- RS485 and RS232 for selection to achieve remote control, or link to the PC for fully achieved remote communication、measuring、controlling、reading and setting the controller running parameters..
- The controller is integrated closely by aluminum alloy panel and steel shell which has been spurt powder . All connection of the controller are connected by pin-like terminal with lock, such device can be connected moved maintained and replaced easily and conveniently.

Measuring and Data display:

3-Phase Voltage: L1-N, L2-N, L3-N
3-Line Voltage: L1-L2, L2-L3, L3-L1
3-Phase Current: L1-L2, L2-L3, L3-L1
Frequency: HZ
3-Phase Apparent Power (KVA) : AL1 AL2 AL3
3-Phase Active Power (KW) : PL1 PL2 PL3 ∑P
3-Phase Reactive Power (Kvar) : QL1 QL2 QL3 ∑Q
3-Phase Power Factor (COSΦ) : PFL1 PFL2 PFL3
Active Energy (KWh) : ∑E
Reactive Energy (KVArh) : ∑E
Gen. Running Speed (RPM)
Gen. Oil Pressure
Gen. Temperature
Speed-sensor
Battery Voltage
Gen. Running Time
Same Way A. S Analog Input

Panel Button:

AUTO Key (Auto-operation Mode)
MAN Key (Manual-operation Mode)
TEST Key (Test Running Mode)
START Key (Start-up Button)
STOP/RESET (Stop/Fault Reset Button)
L. TEST/MUTE (Lamp Test/Mute Button)
▶ Key (Parameter Setting)
▼ Key (Menu Scroll Down/Value Degression
▲ Key (Menu Scroll Up/Value Increase)

Panel LED Indicator:

Charge Fail
Fail To Start
Low Oil Pressure
High Temperature
Overspeed
Emergency Stop
Auto-operation Mode Indicator
Maunal-operation Mode Indicator
Test Running Mode Indicator
Gen. Start-up Indicator
Stop/Stop Fault Indicator
Mute Indicator
Voltage Fault Indicator
Low Frequency Fault Indicator

Switch Input:

Genset Remote Control Start-up Signal
E-Stop Signal
High Temperature Signal
Low Oil Pressure Signal
Speed Sensor
Spare Status Signal

Running Parameter Configuration:

CT (1～5000)
VT (1～100)
Comm Address (1～255)
Language (Chinese/English)
Low Voltage Alarm (AC45～20000V) 0 (no setting)
Low Voltage Fault (AC45～20000V) 0 (no setting)
High Voltage Alarm (AC45～20000V) 29999 (no setting)
High Voltage Fault (AC45～20000V) 29999 (no setting)
High Current Alarm (0～9999A) 9999 (no setting)
Higjh Current Fault (0～9999A) 9999 (no setting)
Electric Alarm Delay (0～600sec)
Nominal speed (99～9999RPM)
Pickup frequency (1～9999Hz)
Fuel mode 0 (NC) 1 (NO)
Temperature-sensor mode (1～8) 0 (no use)
Pressure -sensor mode (1～9) 0 (no use)
Speed-sensor mode (0 no use/1 use)
Start delay (1～300sec)
Start-up times (1～10s)
Crank time (1～30sec)
Crank reset (1～300sec)
Crank disconnect (1～9999RPM)
Idle delay (0-9999sec)
Safety -on delay (0～600sec)
Cooling delay (0～600sec)
Stop delay (0-60sec)
Under Speed Fault (0～9999RPM) 0 (no setting)
Under Speed Alarm (0～9999RPM) 0 (no setting)
Over Speed Alarm (0～9999RPM) 9999 (no setting)
Over Speed Fault (0～9999RPM) 9999 (no setting)
Low Oil-pressure Fault (50～300kPa) 0 (no setting)
Low oil-pressure Alarm (50～300kPa) 0 (no setting)
High Temperature Alarm (70-160℃) 9999 (no setting)
High Temperature Fault (70-160℃) 9999 (no setting)

Control Relay Output:

Gun Control Output
Start-up Control Output
DC Charger Excited Output
Idle Control Output
Gen. Normal Running
Gen. Alarm
Gen. Fault

Other Parameters:

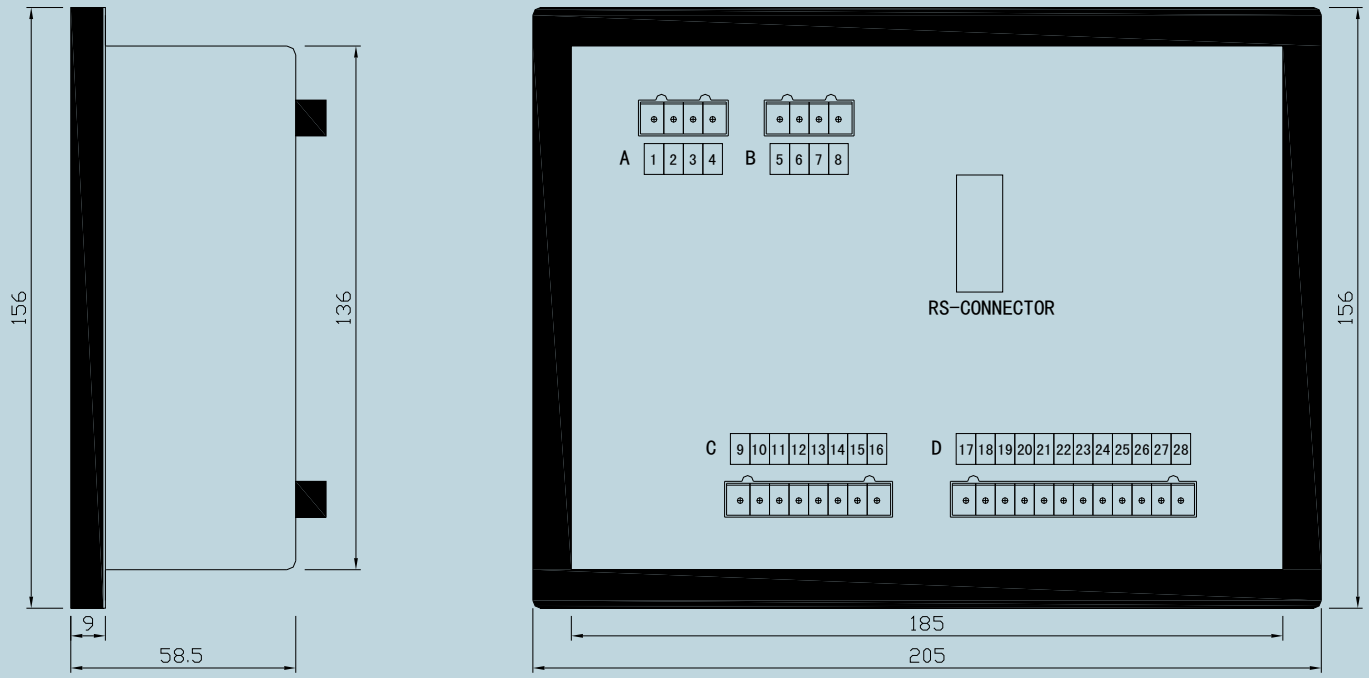
DC Source
Voltage Range: 8～35V Serial
Consume Current: @12V 0.4A, @24V 0.2A
Measuring Voltage: Phase Voltage 10～300Vac RMS (AC Frequency≥40HZ)
Frequency: 3～70HZ (Voltage≥10V)
Speed-Sensor Frequency: Max . 1000HZ
Speed-Sensor Voltage: 0.5～70Vac
Gun/Start relay output: 16A/30VDC
A.S Relay Output: 3A/30VDC
Running temperature: -20～70℃
Storage temperature: -30～80℃

Fault Alarm and Stop:

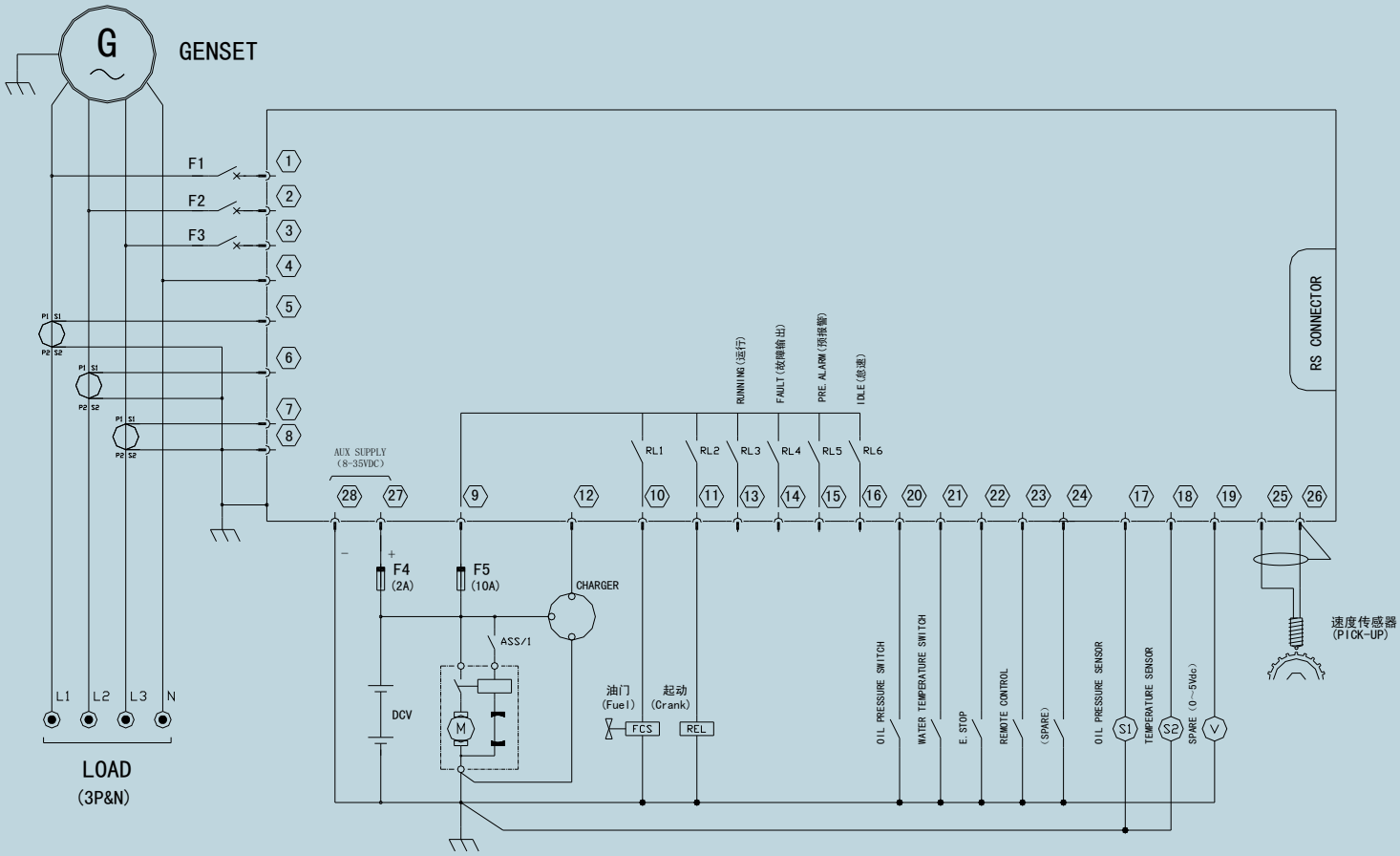
Charge Fault Alarm
High Voltage Alarm/Fault Stop
Low Voltage Alarm/Fault Stop
Over Current Alarm/Fault Stop
Under Speed Alarm/Fault Stop
Overspeed Alarm/Fault Stop
Low Oil Pressure Alarm/Fault Stop
High Temperature Alarm /Fault Stop
Fault To Stop
E. Stop
Spare Alarm/Fault Stop

Shape Dimension:

Control Panel	W205mm×H156mm
Hatch For Installation	W186m ×H137m
Thickness	D58.5mm (unconnected)



Typical Connection



NOTE:CATHODE OF THE BATTERY AND SHELL OF THE CONTROLLER MUST BE GRANDED PROPERLY!

For any further informations,Please browsing our web-site:www.harsen.com.cn

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