

USER Manual



DLS-3P-2AC-V 3-Phase Air Conditioner Controller

Product specification

3 Phase A/C Controller with HP/LP**DLS-3P-2AC-V****General Description**

This product is designed to control two Air Conditioners(A/C) simultaneously. The industry standard AVR Micro-Controller is the heart of this system. Control over the A/Cs are performed according to some parameters like temperature, phase voltage, phase current, swapping time etc. User can set or view various parameters like current temperature, phase current, phase voltage, temperature set-point, high room temperature, swapping time, A/C trip current, A/C last trip reason etc. through a 16 x 2 character LCD panel and a status indication panel will help user quickly monitor the status of the A/Cs. An alarm system generates respective alarm for FMC if any error occurs in the operation. This system keeps the information of last A/C trip reason and the overload current at which the A/C was last tripped in a nonvolatile memory for up to 100 years or the next trip occurs. This device is fully compatible with **VOLTAS SENSICOOL** A/Cs used in the shelter of a mobile tower.

FEATURES:

High performance, three phase two A/C Controller with HP/LP and alarm system.

- Voltage Transient Protection
- Under and over voltage protection
- Over load and Short Circuit Protection
- Status Indicator
- Alarm output for FMC
- HP/LP fault protection
- Adjustable temperature set-point
- Adjustable high room temperature
- Adjustable trip current
- Adjustable swapping time
- Nonvolatile memory for last A/C trip reason
- Nonvolatile memory for last A/C trip overload current

DEVICE SPECIFICATIONS

Product:	3 Phase Air Conditioner(A/C) Controller with HP/LP
Model:	DLS-3P-2AC-V
Supply Voltage:	1 Phase 220V AC
Under voltage protection:	Below 170V AC
Over voltage protection:	Over 280V AC
Overload trip current:	Adjustable 0.5A – 20A for each phase (Step 0.5 A)
Operating Temperature:	-40 to 70 °C
Storage Temperature Range:	-55°C - +105°C
Temperature Set-Point:	Adjustable 10 °C – 40 °C (Step 1 °C)
High Room Temperature:	Adjustable 10 °C – 40 °C (Step 1 °C)
Swapping Time:	Adjustable 6 minute – 24 hour (Step 6 minute)
Nonvolatile Memory Data Retention:	20 years at 85°C/100 years at 25°C

Place of origin: India

3 Phase A/C Controller with HP/LP**DLS-3P-2AC-V****Operation**

1. Two controllers can work at a time as per the requirement.
2. One CPU unit is there which will provide the command to each controller.
3. Both controllers will work alternatively after predefined time period (Adjustable from CPU Default – 4hr.).
4. Temperature set point is adjustable from CPU (Adjustable from CPU Default- 27 deg).
5. Second compressor will get start if the shelter temperature goes above high room temperature (Adjustable from CPU Default 30 deg. cent.) and stop when the shelter temperature gets down to Temp. set point(i.e. 27 deg. Cent.).
6. Both A/C will be turned off if the temperature decreases 2 deg. cent. below tem. set point.
7. Blower fan and condenser fan will get start at a time before 30 seconds start of compressor and get stop at the time of compressor get stop.
8. Controller will work with a voltage range i.e. 170 to 260.
9. CPU unit has two column of leds (both unit 1 & 2) for the following parameters.
 - A) A/C ON
 - B) Supply ON
 - C) HP/LP
 - D) Over/Under Voltage
 - E) Over/Under Load
 - F) Single phasing
 - G) Sensor Faulty
 - H) Alarm

Contents in a Package

It has 2 Controller Units and one CPU unit, one Temperature Sensor and two connectors with cable.

**CPU UNIT****CONTROLLER****CONNECTOR CABLE****TEMPERATURE SENSOR**

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Hardware

Front and back panel of the CPU Unit is shown below. You can change value or any configuration by using three buttons (SET, ^ and v) but the lock switch in the back panel must be ON.



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Connection Diagram

