

# Package Air conditioner controllers

## A3-S351 / 352 / 353 / 354 / 355



1. **A3-S35X-XX** series of electronic controllers are designed for package/duct able air conditioners application with and without control panels. These models are manufactured with varying number of compressors/cylinders from 1 to 5 with a single blower. The controllers are provided with cool and fan modes with the required individual as well as common protections, blower failure interlocks etc. Other protections like power-up delay of 180 seconds, individual delays between loading/unloading while switching it ON/OFF, compressor running hour equalization, automatic loading/unloading as per the cooling requirement etc. The controller is provided with a digital display to indicate temperature, UP/DN switches to set temperature, individual LED indications for displaying errors, status, modes of operations etc.

The model with control panel comes with the contactors required for the blower, compressors, SPP, overload protection, terminations for input & output power and other compressor error interlocks etc. We have a control panel that has star-delta contactors for the blowers.

### 2. Product selection

As mentioned earlier, we manufacture these controllers with and without control panels. The digit X followed by the model series denotes the number of compressors/cylinders and subsequent XX, the controller with control panel (the last digit XX). The letters 01/00 denotes the controller with & without out the control panel consisting of DOL contactor for the blower. We manufacture these with standard contactor rating of 12/25/32 Amps rating. We request to consult us if clarifications needed.

### Product highlights

- Cool / Fan modes
- Operation of the system with five compressors and a single blower fan.
- DOL or star – delta operation of blower fan with safety electrical interlocks.
- 16 to 30°C temperature setting with room temperature display.
- Loading/unloading facility as per load to save power & operational cost.
- electrical and fire damper outputs
- Two models with and without control panels.

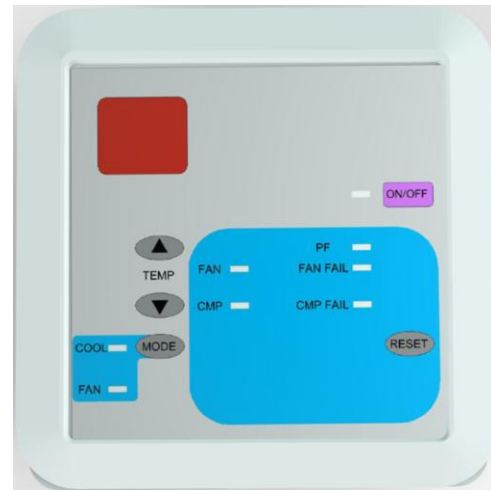


Fig.1 Package AC controller A3-S351-TR-3P

### 3. Modes of operation.

The controllers are provided with various modes of operation as given below.

**3.1 Cool mode:** The controller would operate the air conditioning system as per the set temperature value between 16 to 30°C while keeping the blower fan running. The built-in intelligence with the help of settable cooling range between 0 to 5°C, loads/unloads the compressors as per the load requirement.

**3.2 Fan mode:** - the evaporator fan alone would work in this mode and ensures that the air circulation is taking place.

### 4. Safety & operational interlocks

It is provided with safety as well as electrical interlocks to ensure safe operating of the system. A shutdown of compressor operation in case of blower fan error, HP/LP/OLP, SPP, overload, fire detection errors etc. Separate electrical output to operate the Electrical and fire dampers is also provided. These controllers, tested as per IEC standards, have been cleared for EMC / EMI and are field proven.

### Application

- Cooling cabins
- Telecom exchanges
- Computer server rooms
- Machining centres
- Industrial applications

## Product Selection Chart

Model number	No of compressor(s)	No of blower fan(s)	Mode		EVP fan Single speed	Error interlocks				LED display
			Fan	Cool		SPP	Comp O/L	Blower fan fail	Power fail	
A3-S351-TR-3P	1	1	✓	✓	✓	✓	✓	✓	✓	✓
A3-S352-TR-3P	2	1	✓	✓	✓	✓	✓	✓	✓	✓
A3-S353-TR-3P	3	1	✓	✓	✓	✓	✓	✓	✓	✓
A3-S354-TR-3P	4	1	✓	✓	✓	✓	✓	✓	✓	✓
A3-S355-TR-3P	5	1	✓	✓	✓	✓	✓	✓	✓	✓

**Note:** Product selection example for a two-compressor model package air conditioner controller with control panel with contactor for DOL blower fan motor: - **A3-S352-01**

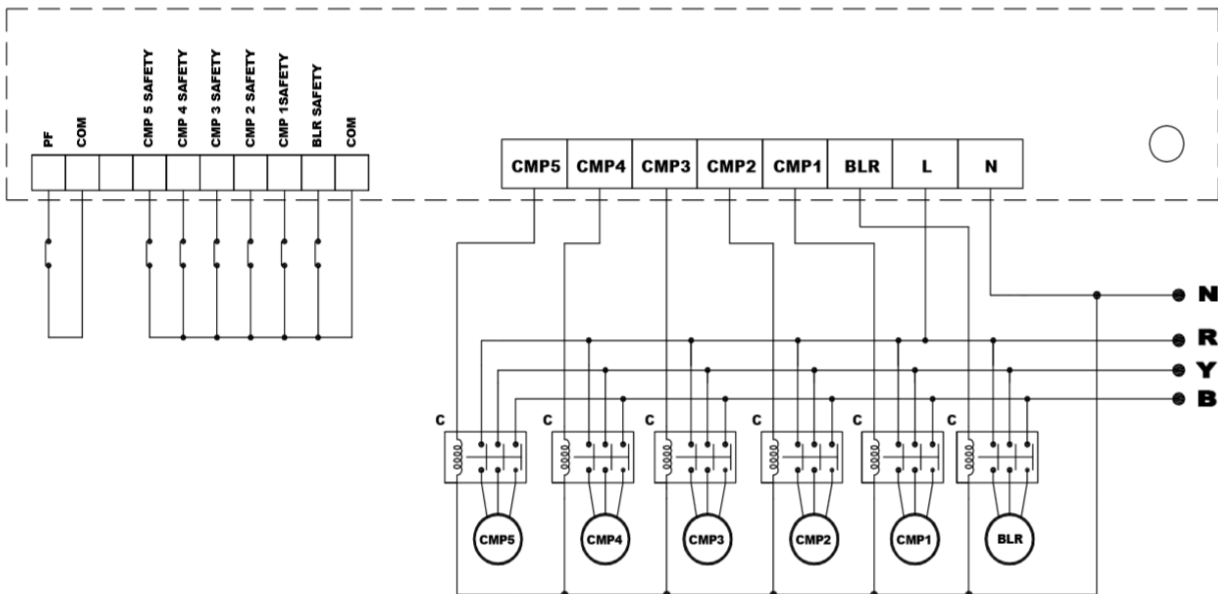
*The product could be provided with IR remote control on customer's requirement.*

### Mechanical dimensions (L × B × H)

Power Box : 250 × 170 × 70mm

Display box : 125 × 125 × 15mm

### Electrical connection diagram



**NOTE :- COM TERMINALS ARE PROVIDED WITH 230 V AC**

**C - CONTACTOR**

#16, Pillaiyar Koil Street, Kanagam, Taramani (PO), Chennai-600 113, INDIA.

Website:- [www.presevi.in](http://www.presevi.in) ✉ [admin@presevi.in](mailto:admin@presevi.in), [marketing@presevi.in](mailto:marketing@presevi.in)

☎ +91 44 22542561/63/64 📠 : +91 44 22542562 📞 +91 9382150289

**AN ISO certified company with DSIR certified R&D**