

DC-link connection for VFAS1

In TOSVERT VF-AS1 with DC-link connection, it is necessary to install inrush current suppression unit' at middle range or more over.

Combination with 'inrush current suppression unit'

| Input Voltage Class | Capacity [kW] | VFAS1's FORM | Option judgement | Option |
|---------------------|---------------|--------------|------------------|---------------|
| 200V class | 0.4 ~ 15 | 2004~2150 | Not need | - |
| | 18.5 ~ 55 | 2185~2550 | Need | MCR-2550 |
| | 75 | 2750 | Need | MCR-2550 * 2p |
| 400V class | 0.75 ~ 18.5 | 4007~4185 | Not need | - |
| | 22 ~ 110 | 4220~4110K | Need | MCR-2550 |
| | 132 ~ 220 | 4132K~4220K | Need | MCR-2550 * 2p |
| | 280 | 4280K | Need | MCR-2550 * 3p |
| | 355 , 400 | 4355K, 4400K | Need | MCR-2550 * 4p |
| | 500 | 4500K | Need | MCR-2550 * 5p |

2p: 2 parallel connection

NOTICE: In VF-AS1 with DC-link connection, the DC-reactor is not necessary to install.

1. Up to 280kW: Not to need order DC-reactor
2. Up to 500kW: Order by next type-form that doesn't have DC-reactor.

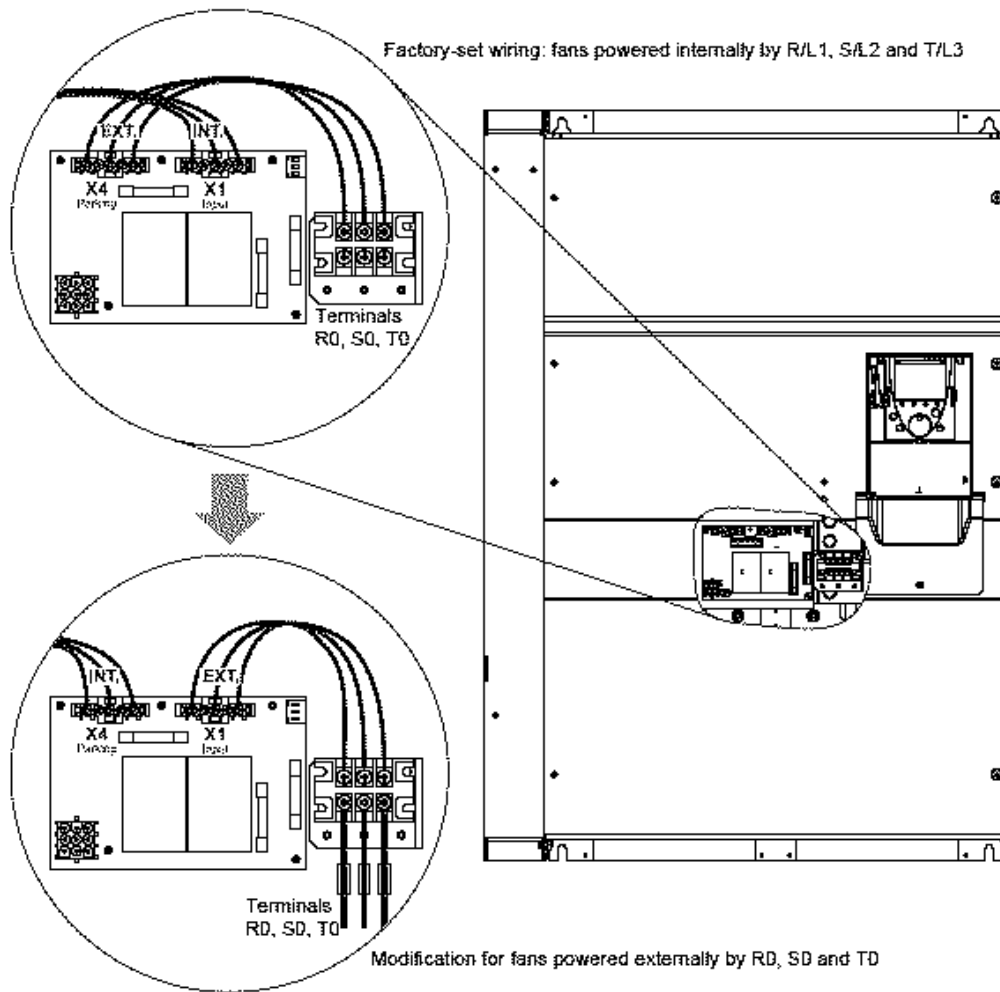
VFAS1-4355KPCY-A5

VFAS1-4400KPCY-A5

VFAS1-4500KPCY-A5

Change the connection of cable for cooling fan

At 200V-75kW and 400V-110kW or more over, the cooling fan is connected to commercial power supply (3 phase). Therefore, in case of DC-link connection, it is necessary to connect commercial power supply to terminal blocks (R0, S0, T0) after changed connection X1 and X4 as below figure.



Parallel connection of 'inrush current suppression unit'

Please prepare the 'terminal block' for each suppression unit's wiring.

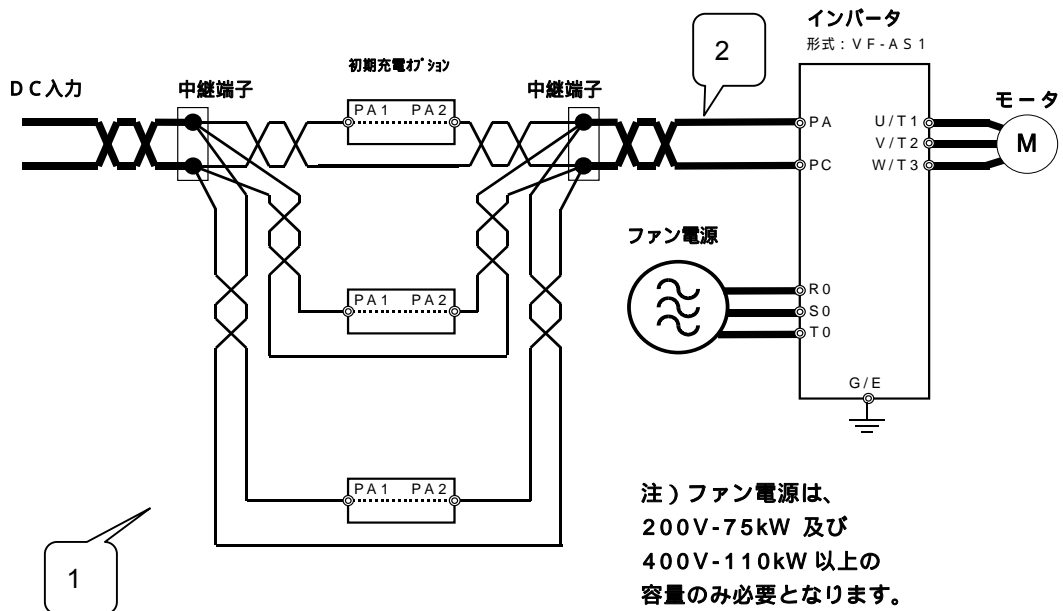


Table of wire size selection

| Voltage Class | Motor [kW] | Parallel | Wire size for '1' wire (mm2) | Wire size for '2' wire (mm2) |
|---------------|------------|----------|------------------------------|------------------------------|
| 200V class | 75 | 2 | 100 | 100 * 2p |
| 400V class | 132 | 2 | 60 | 60 * 2p |
| | 160 | 2 | 100 | 100 * 2p |
| | 200 | 2 | 150 | 150 * 2p |
| | 220 | 2 | 150 | 150 * 2p |
| | 280 | 3 | 100 | 150 * 2p |
| | 355 | 4 | 100 | 100 * 2p * 2p |
| | 400 | 4 | 150 | 150 * 2p * 2p |
| | 500 | 5 | 100 | 150 * 2p * 2p |

- The recommended cable is 600V class HIV cable with 90 degreeC.

- The number refers to a cable terminal.

100 * 2 * 2

Numbers of cables connected in parallel on the terminal board

Number of cables connected to each terminal board

Cable size

Interlock for 'inrush current suppression unit'

Please set F130 (OUT1)=114(input for external relay) or F131 (OUT2)=114 and set F635=1sec.

The contact between STA and STC is necessary to connect ST and CC with series connection.

