VENT-AXIA
LONG CASE AXIAL FANS
WIRING DIAGRAMS

SINGLE PHASE FAN
CONNECTED TO A D.O.L. STARTER

1 Phase Supply (220-240V 50 Hz)
L - N

FAN TERMINAL

3 Phase Supply (380-415V 50 Hz)

240 Volt D.O.L. Starter
A suitable sized overload relay must be fitted to provide motor protection.
N.B. Links between terminals 1 to A1, 1 to 3, 5 to 95 and 24 to 96 must be fitted.

L C31A2/1/8-32°
C31A4/1/8-32°
C35A2/1/8-32°
C35A4/1/8-32°
C40A2/1/8-32°
C40A4/1/8-32°
C50A2/1/8-32°
C50A4/1/8-32°
C63A2/1/8-32°
C63A4/1/8-32°

SINGLE PHASE FAN
CONNECTED TO A D.O.L STARTER AND 3.0, 5.0, 7.5 OR 11.0 AMP AUTO TRANSFORMER

1 Phase Supply (220-240V 50 Hz)
L - N

FAN TERMINAL

3 Phase Supply (380-415V 50 Hz)

240 Volt D.O.L. Starter
A suitable sized overload relay must be fitted to provide motor protection.
N.B. Links between terminals 1 to A1, 1 to 3, 5 to 95 and 24 to 96 must be fitted.

L C31A4/1/8-32°
C35A4/1/8-32°
C40A4/1/8-32°
C50A4/1/8-32°
C63A4/1/8-32°

LONG CASE AXIAL FANS
WIRING DIAGRAMS

THREE PHASE FAN
CONNECTED TO A 415V D.O.L. STARTER

3 Phase Supply (380-415V 50 Hz)
L - L - L - N

FAN TERMINAL

415 Volt D.O.L. Starter
A suitable sized overload relay must be fitted to provide motor protection.
N.B. Links between terminals 5 to 95 and 24 to 96 must be fitted.

L C31A4/3/8-32°
C35A4/3/8-32°
C40A4/3/8-32°
C50A4/3/8-32°
C63A4/3/8-32°
C71A4/3/8-18°
C80A4/3/8-28°
C90A4/3/8-30°
C103A4/3/8-32°

THREE PHASE FAN
CONNECTED TO A 240V D.O.L. STARTER

3 Phase Supply (380-415V 50 Hz)
L - L - L - N

FAN TERMINAL

240 Volt D.O.L. Starter
A suitable sized overload relay must be fitted to provide motor protection.
N.B. Links between terminals 5 to 95 and 24 to 96 must be fitted.

L C31A4/3/8-32°
C35A4/3/8-32°
C40A4/3/8-32°
C50A4/3/8-32°
C63A4/3/8-32°
C71A4/3/8-32°
C80A4/3/8-28°
C90A4/3/8-30°
C103A4/3/8-32°

THREE PHASE FAN
CONNECTED TO A START / DELTA STARTER

3 Phase Supply (380-415V 50 Hz)
L - L - L - N

FAN TERMINAL

3 Phase Auto Transformer / Starter with current overload protection and a 415 volt coil.
N.B. Links between terminals 1 to A1, 1 to 3, 5 to 95 and 24 to 96 must be fitted.

L C31A2/3/8-28°
C35A2/3/8-28°
C40A2/3/8-28°
C50A2/3/8-28°
C63A2/3/8-28°
C71A2/3/8-30°
C80A2/3/8-30°
C90A2/3/8-30°
C103A2/3/8-30°
C125A2/3/8-30°

THREE PHASE FAN
CONNECTED TO A 415V D.O.L. STARTER & A 1.4, 4.0, 7.0 OR 11.0 AMP AUTO TRANSFORMER CONTROLLER.

3 Phase Supply (380-415V 50 Hz)
L - L - L - N

FAN TERMINAL

415 Volt D.O.L. Starter
A suitable sized overload relay must be fitted to provide motor protection.
N.B. Links between terminals 1 to A1, 1 to 3, 5 to 95 and 24 to 96 must be fitted and the link between terminals 24 to 96 must be FITTED.

L C31A4/3/8-32°
C35A4/3/8-32°
C40A4/3/8-32°
C50A4/3/8-32°
C63A4/3/8-32°
C71A4/3/8-32°
C80A4/3/8-32°
C90A4/3/8-30°
C103A4/3/8-32°
C125A4/3/8-32°

NOTE: If Auto Transformer is being used to control the fan speed, the manual reset facility must be disabled. Contact Vent-Axia’s Technical Support line for details.

VENT-AXIA
LONG CASE AXIAL FANS (LC)
LONG CASE AXIAL FANS
WIRING DIAGRAMS

THREE PHASE FAN
THREE PHASE IN - THREE PHASE OUT
LC FAN CONNECTED TO AN INVERTER SPEED
CONTROLLER KIT (103 20 350 OR 103 20 310)

Inverter
455559 or 455560

User Fan
Speed Controller
ILVC 2
(103 20 602)

Ferrite Coil
(Loop the fan supply cable around
the ferrite coil 3 times).

Shielding
(WRAP WITH INSULATION TAPE DO NOT
CONNECT TO THE EARTH TERMINAL).

Shielded Cable
(WRAP WITH INSULATION TAPE).

Ferrite Coil
(Loop the fan supply cable around
the ferrite coil 3 times).

50m Maximum Distance from
the Inverter to the Fan
(shielded cable required).

Metal Enclosure &
Wiring by others.

Three Phase Supply
(380-415V 50Hz)

Connector
50m Maximum Distance from
the Inverter to the Fan
(shielded cable required).

Metal Enclosure &
Wiring by others.

10 Volt D.C. (up to a maximum distance of 50m
from the Inverter to the speed controller.

10 Volt D.C. (up to a maximum distance of 50m
from the Inverter to the speed controller.

VENT-AXIA
LONG CASE AXIAL FANS
WIRING DIAGRAMS

THREE PHASE FAN
THREE PHASE IN - THREE PHASE OUT
LC FAN CONNECTED TO AN INVERTER SPEED
CONTROLLER KIT (103 20 315)

Inverter
103 20 315

User Fan
Speed Controller
ILVC 2
(103 20 602)

Ferrite Coil
(Loop the fan supply cable around
the ferrite coil 3 times).

Shielding
(WRAP WITH INSULATION TAPE DO NOT
CONNECT TO THE EARTH TERMINAL).

Shielded Cable
(WRAP WITH INSULATION TAPE).

Ferrite Coil
(Loop the fan supply cable around
the ferrite coil 3 times).

50m Maximum Distance from
the Inverter to the Fan
(shielded cable required).

Metal Enclosure &
Wiring by others.

Three Phase Supply
(380-415V 50Hz)

Connector
50m Maximum Distance from
the Inverter to the Fan
(shielded cable required).

Metal Enclosure &
Wiring by others.

10 Volt D.C. (up to a maximum distance of 50m
from the Inverter to the speed controller.

10 Volt D.C. (up to a maximum distance of 50m
from the Inverter to the speed controller.

90 6 1110
81 6 1110

RS T VB1
/R
B1
/P-
U/T1
W/T3
B1
/U/T2
+/R
+/S-/S(+) S(-)
/IP12
EGND
AIN AUX
AO1
DO2
DO1
A(+) E
IG12
A(-)

Filter
103-20-512
103-20-524

3 Phase Supply
(380-415V 50Hz)

Connector

24V

LC50A2/3/18-26˚
LC56A2/3/8-24˚
LC63A2/3/8-20˚
LC71A4/3/20-30˚
LC80A4/3/8-28˚
LC90A4/3/8-18˚
LC100A4/3/8-12˚