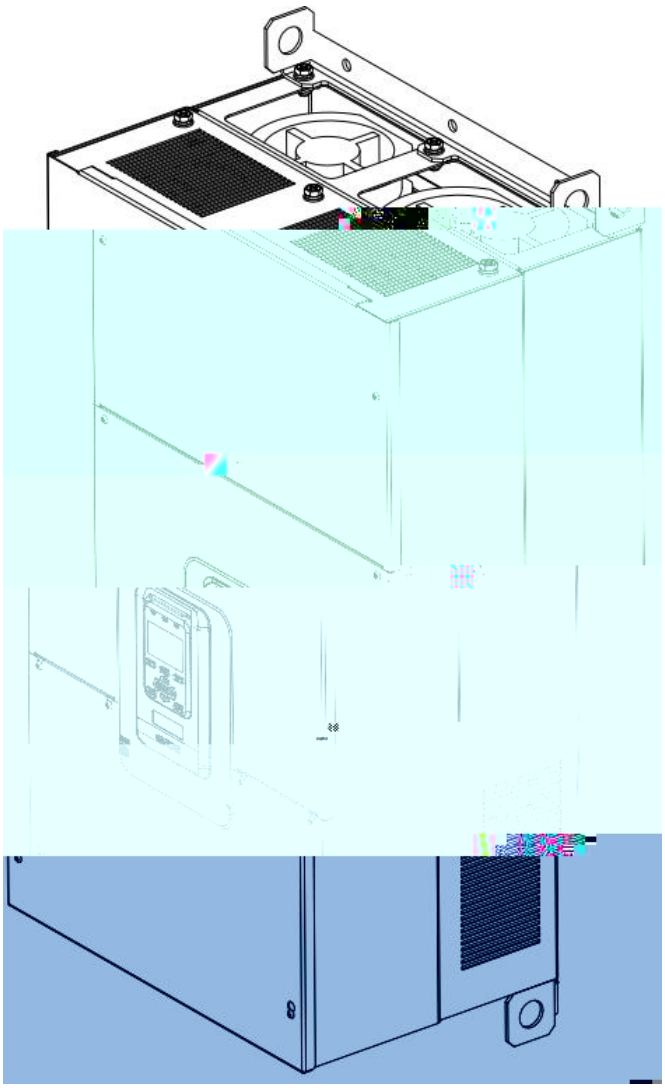
GUIDE Inverter HF630-L (MT) Series Technical Manual

Version: 1.06

Ensure the end user receives this manual and keep it properly.

Wuhan Guide Technology Co.,Ltd.



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(1) It is prohibited to touch the heat sink 10 minutes after power on or for a while after power off to prevent getting burnt;

(2) Do not operate the drive on and off frequently and re-energization is prohibited within five minutes after power switched on again;

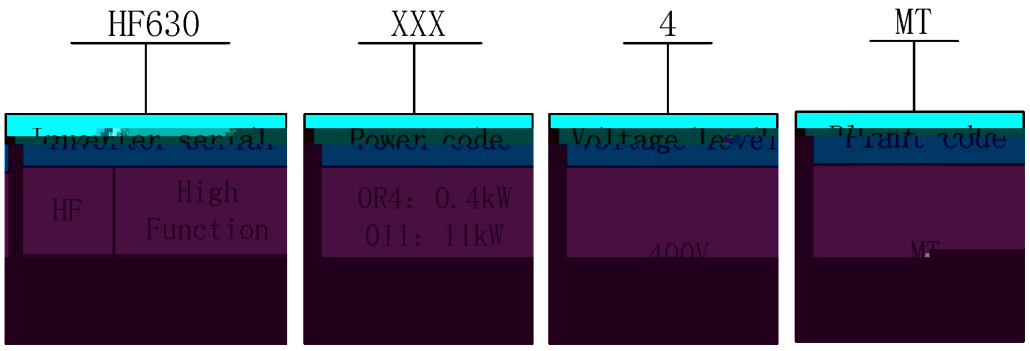
(3) Do not remove the drive cover or touch the printed circuit board under power on state to prevent electric shock;

(4) Working as wiring and inspections should be carried out only after the power

(6) No object is allowed to drop into the inverter.

(1) The inverter is prohibited to be [illegible] flammable [illegible];

(2) This series of inverters are not suitable in flammable [illegible]


HF630
XXX
4
MT
HF
High
Function
OR4: 0.4kW
011: 11kW
400V
MT

MODEL: 84072083

POWER: 15kW

RATED CURRENT: 32A

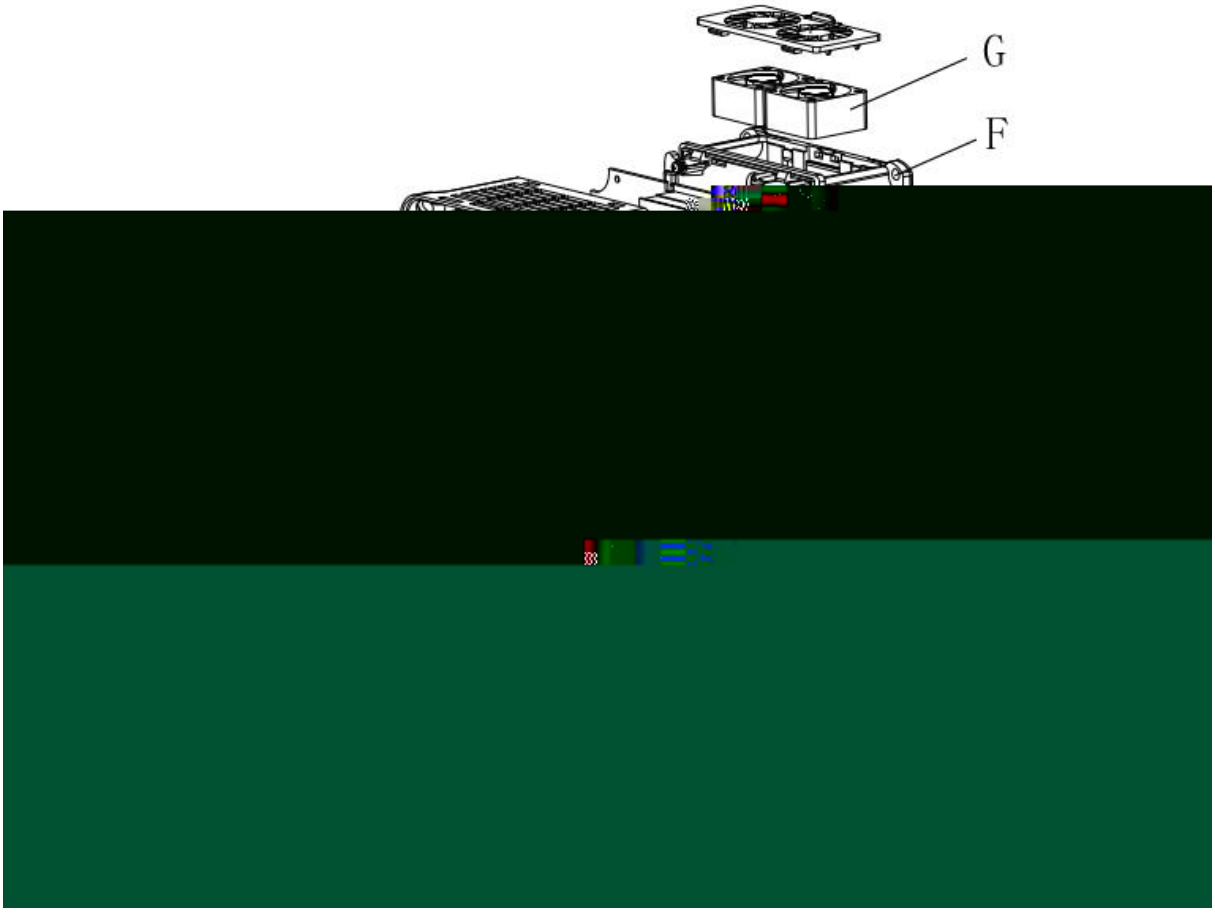
Inverter

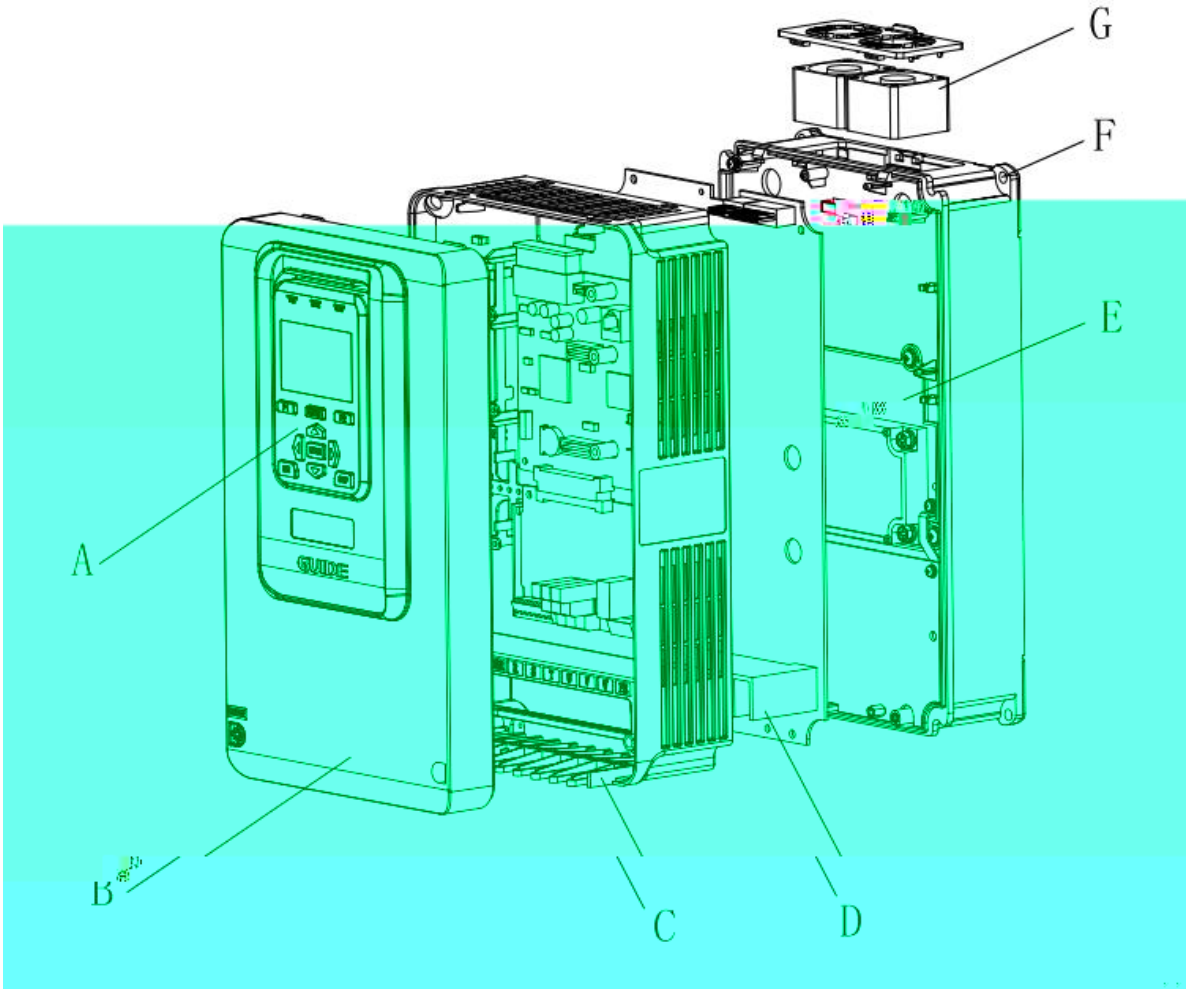
OUTPUT: AC3PH 0-480V 0-300Hz

Product ID.

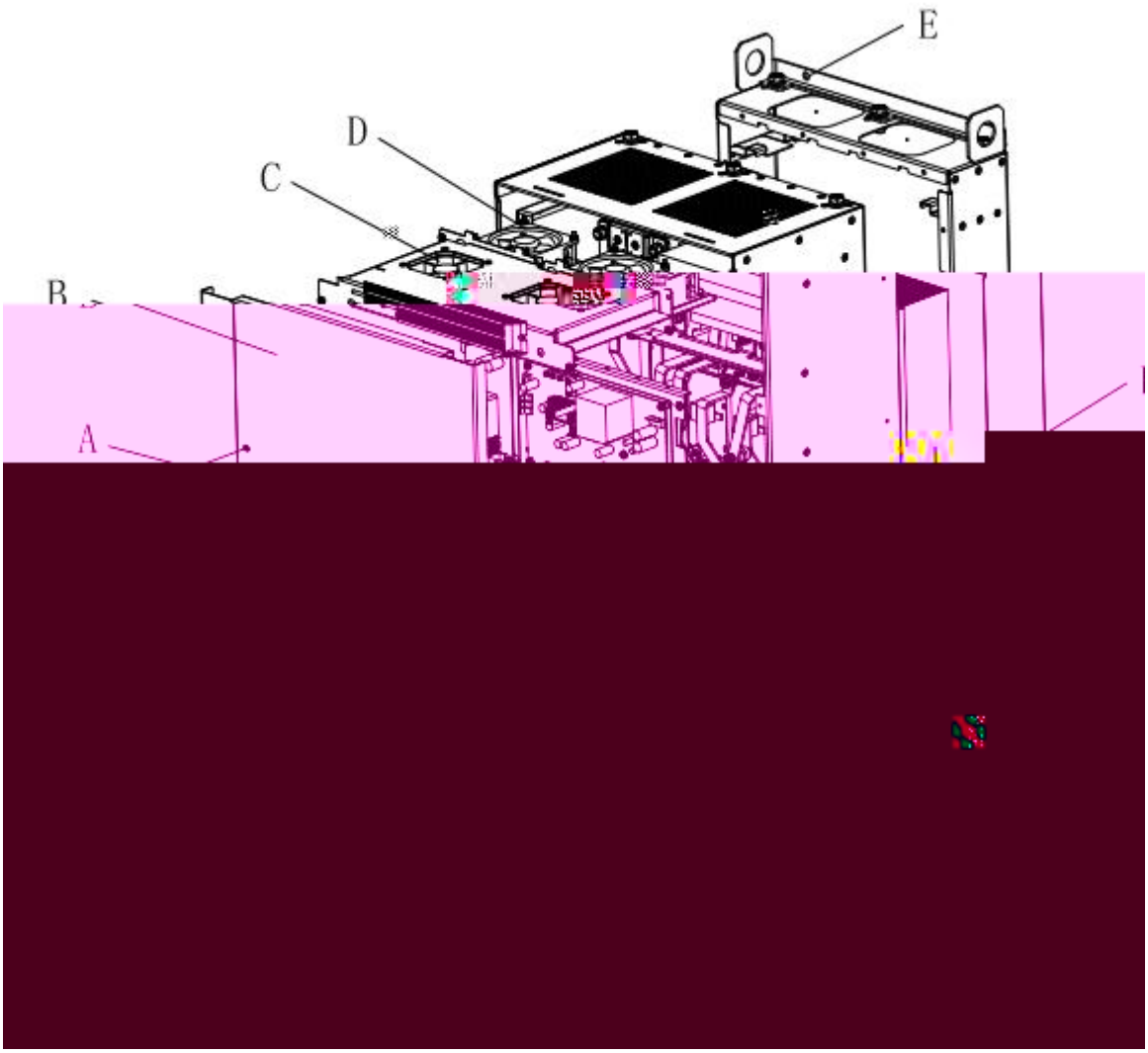
D4015008CK002

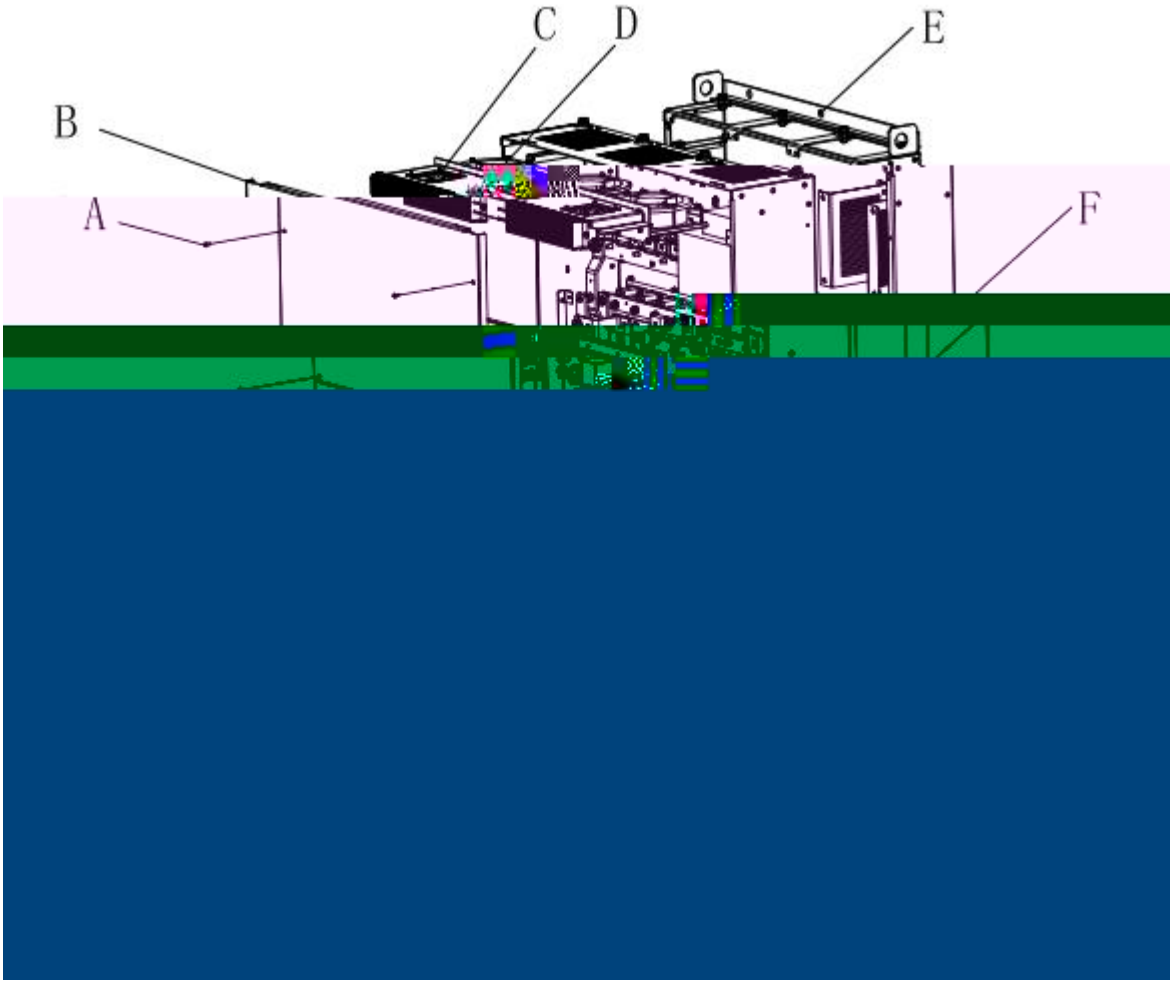
E- STAND: V1

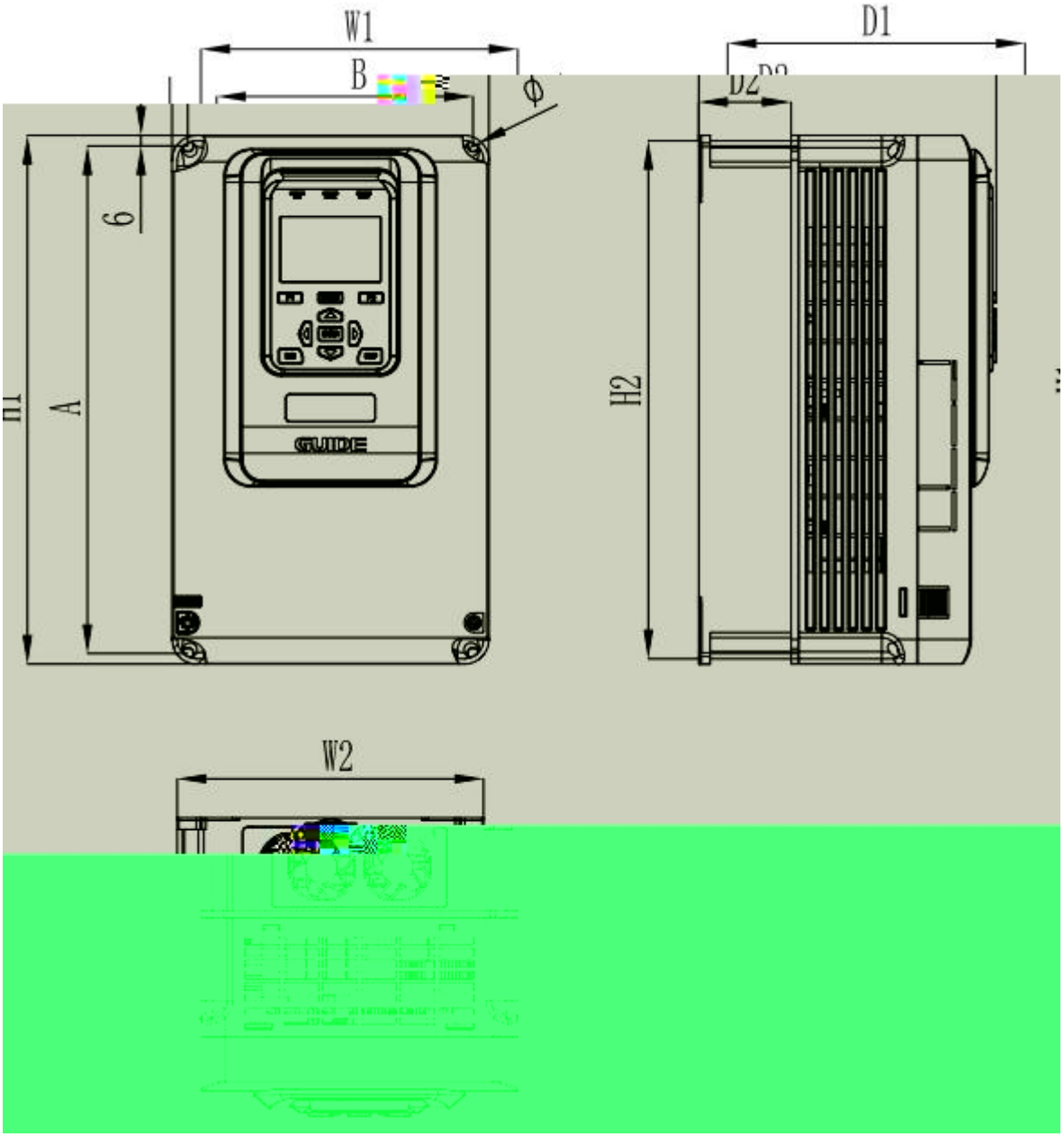

G
F

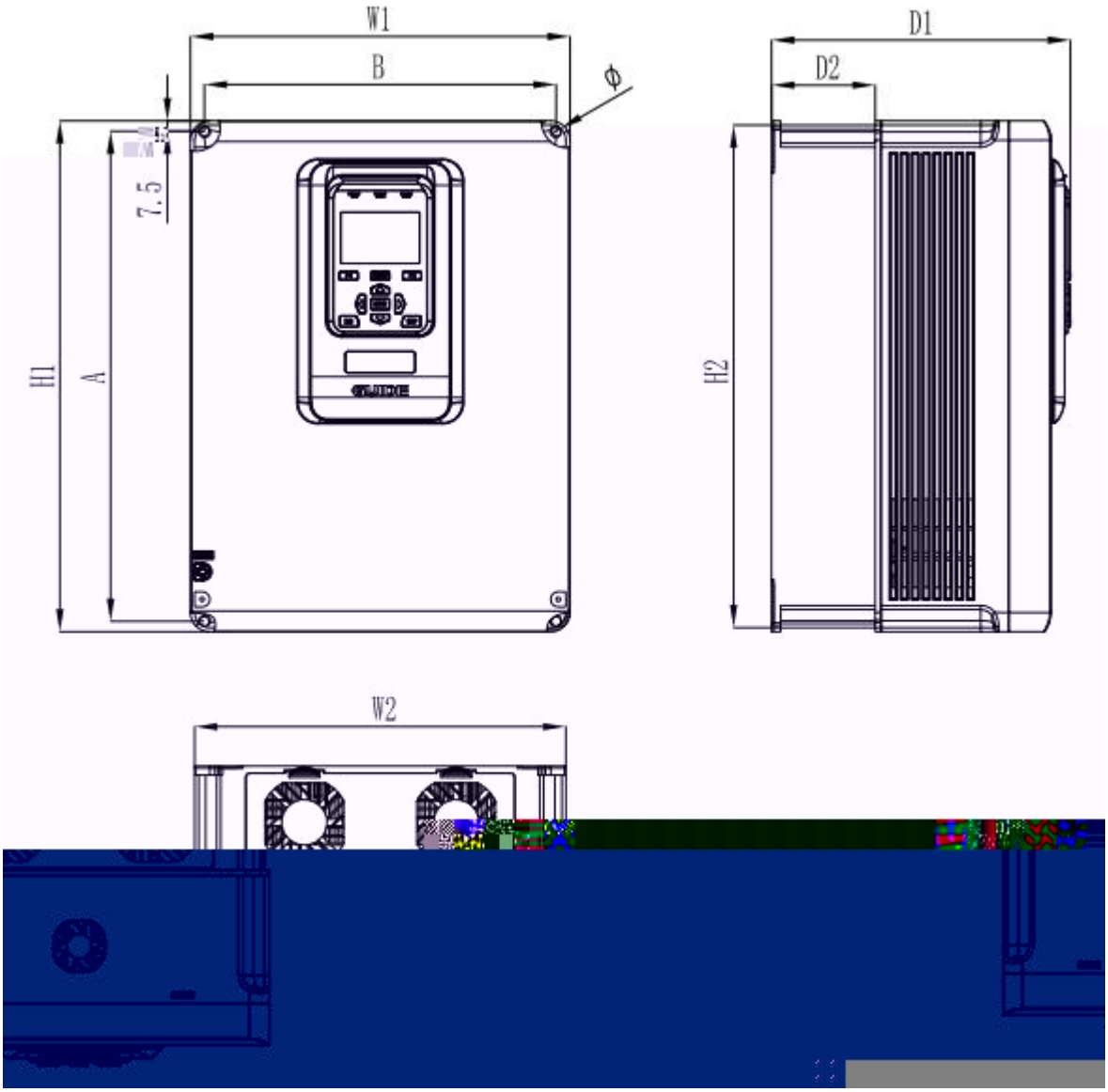

G
F
E
A
B
C
D
GUIDE

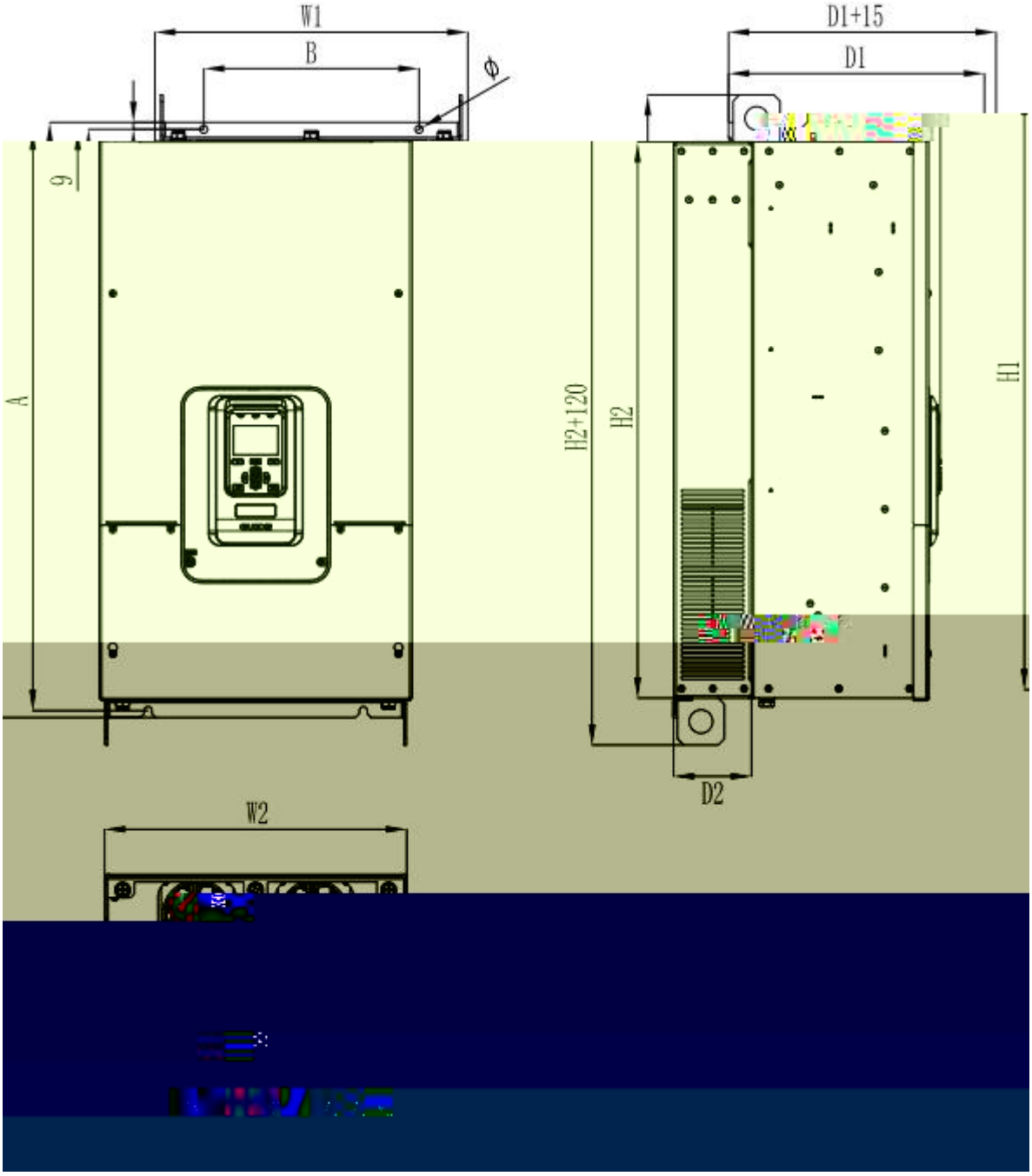
G

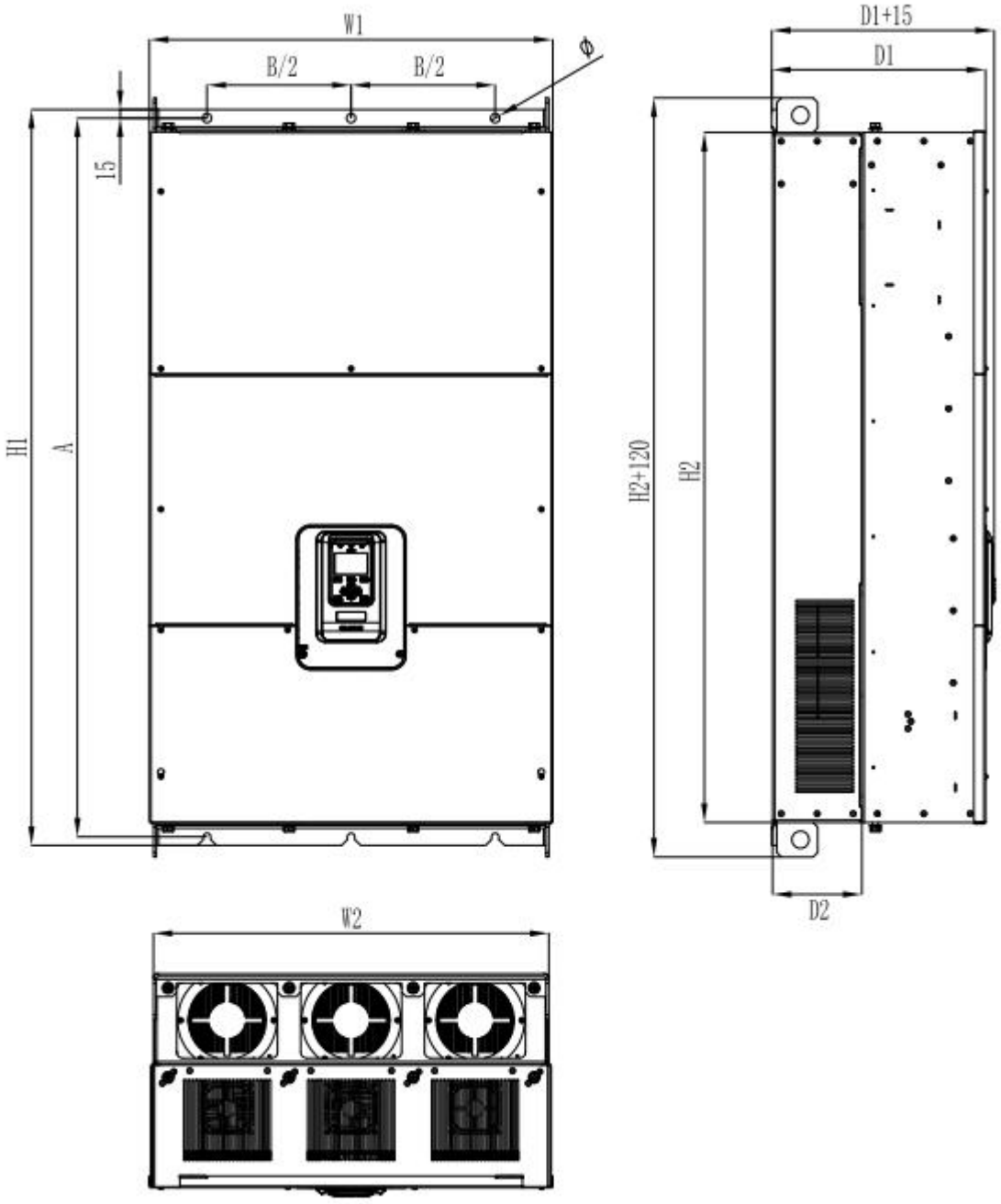

E
D
C
B
A

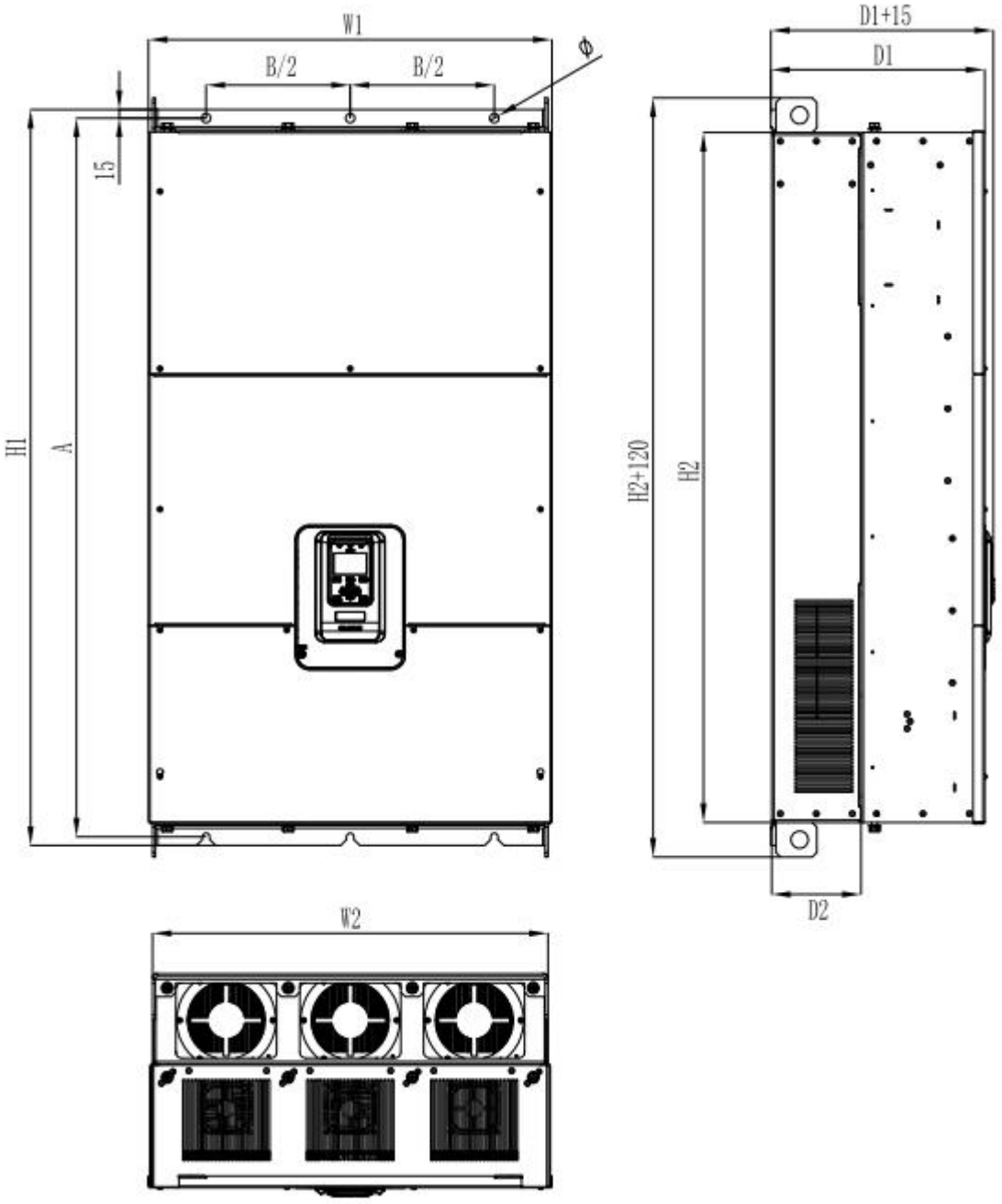

C
D
E
B
A
F

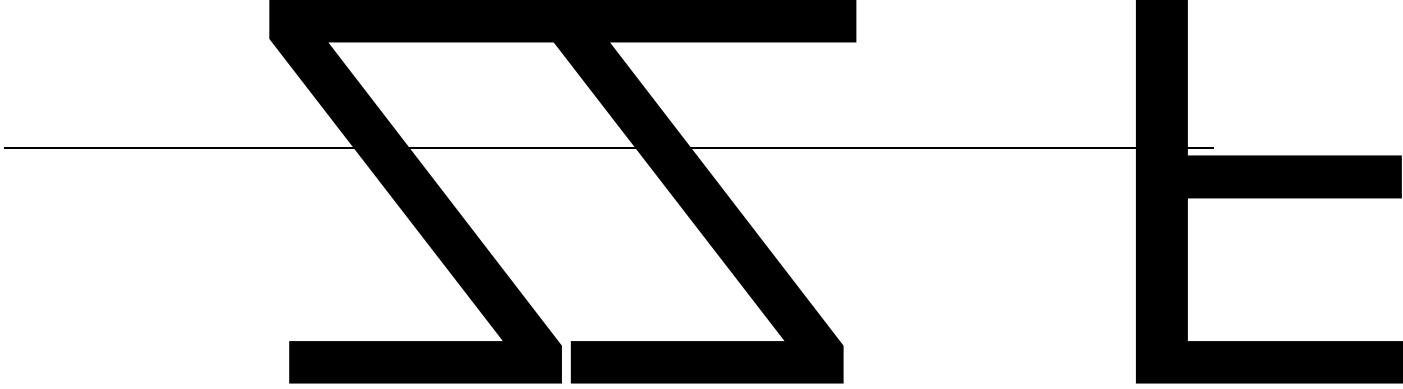

W1
B
D1
6
A
H2
GUIDE
W2


W1
B
Φ
D1
D2
7.5
H1
A
H2
W2

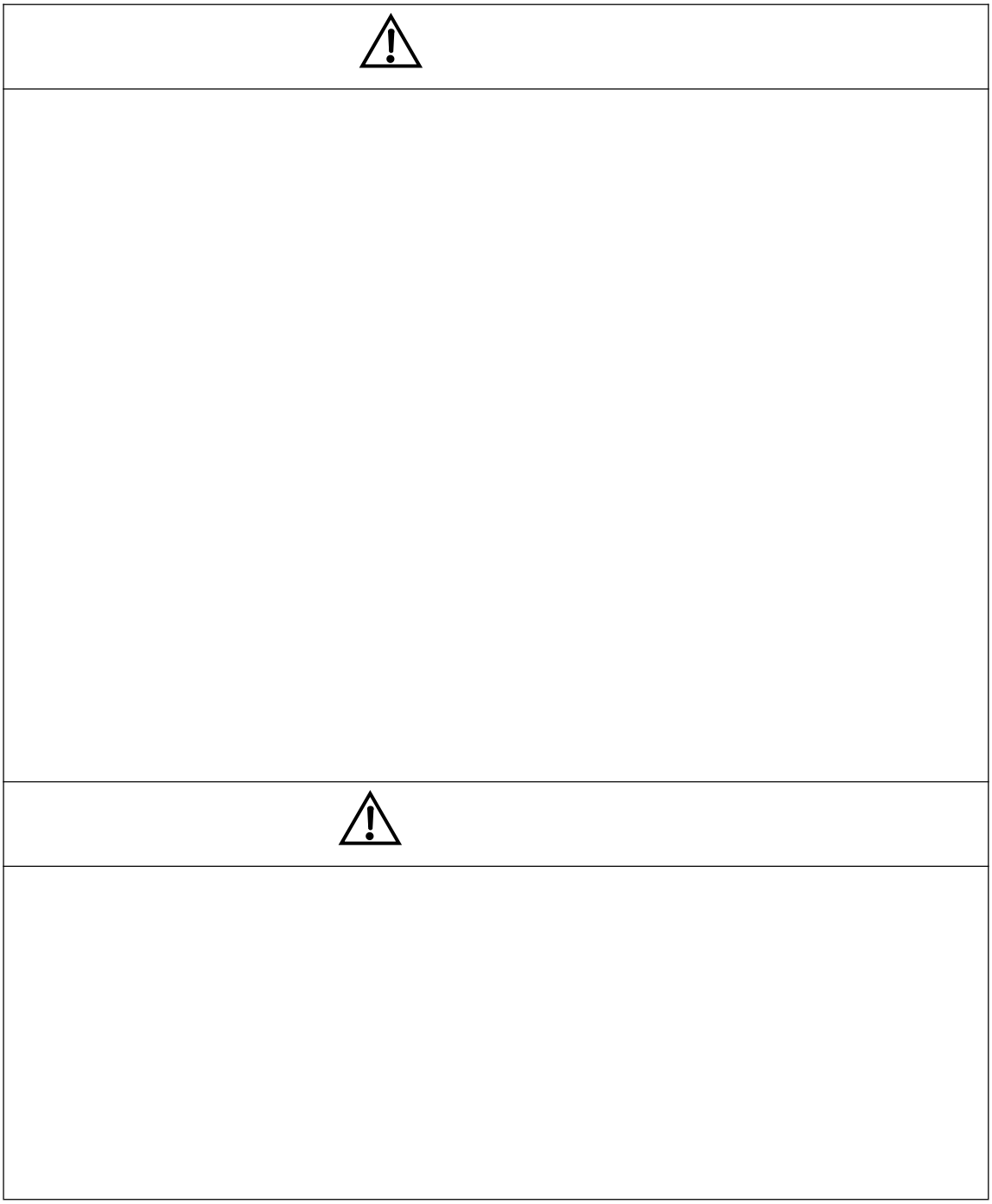

W1
B
Φ
9
A
D1+15
D1
H2+120
H2
H1
D2
W2


W1
B/2
B/2
ϕ
15
H1
A
D1+15
D1
H2+120
H2
D2
W2


W1
B/2
B/2
Φ
15
H1
A
D1+15
D1
H2+120
H2
D2
W2



H ZZ F FDQ F



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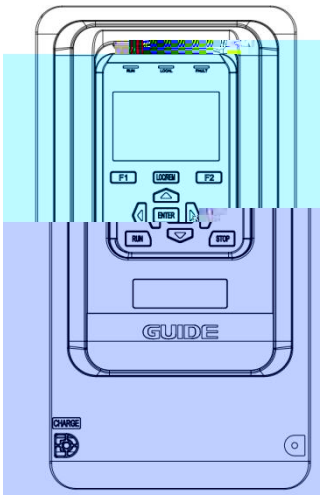
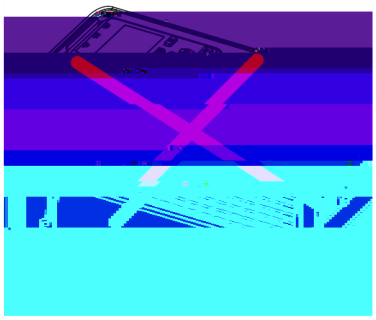
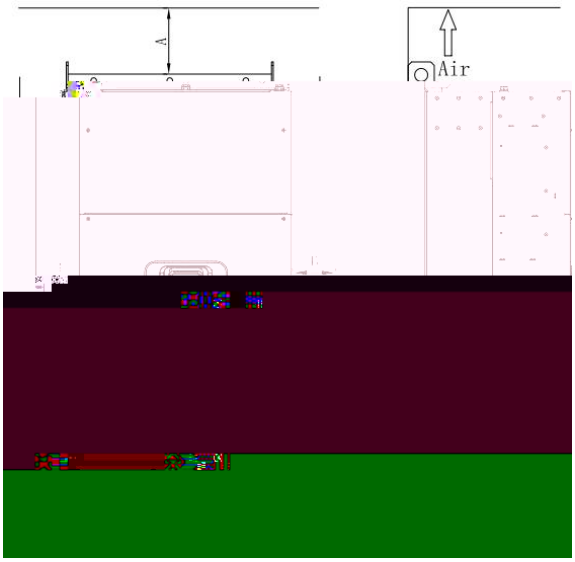
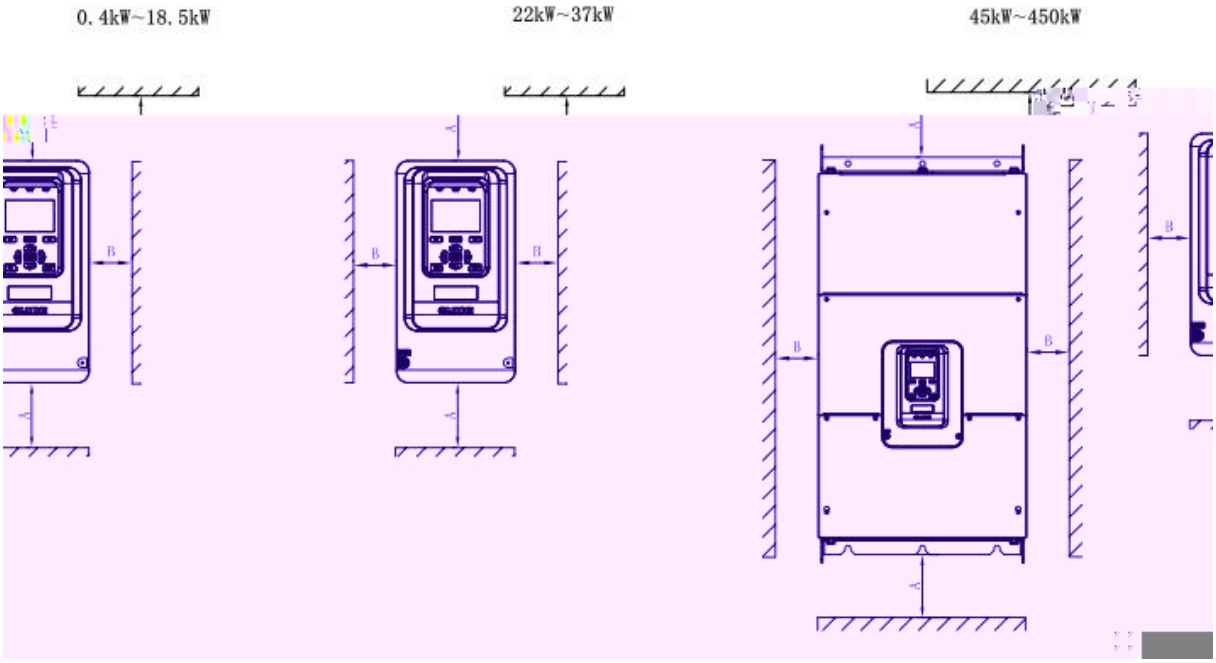
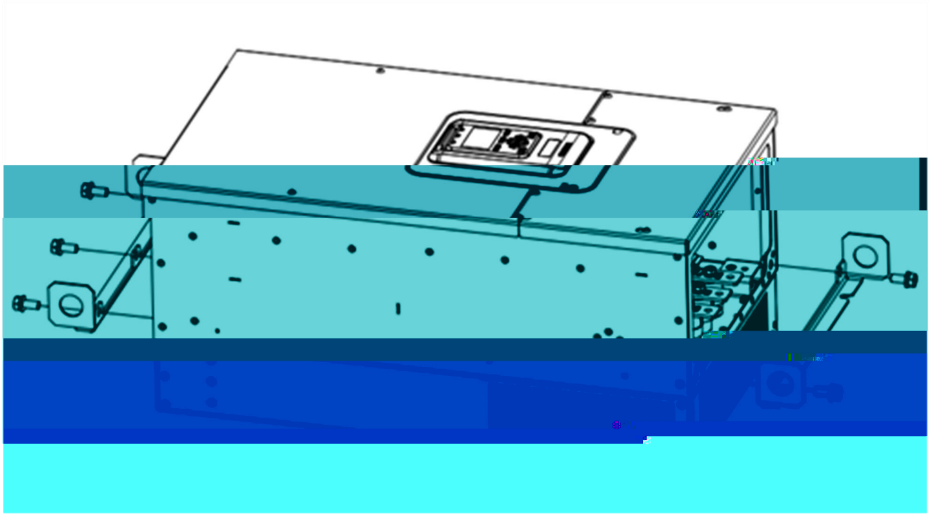
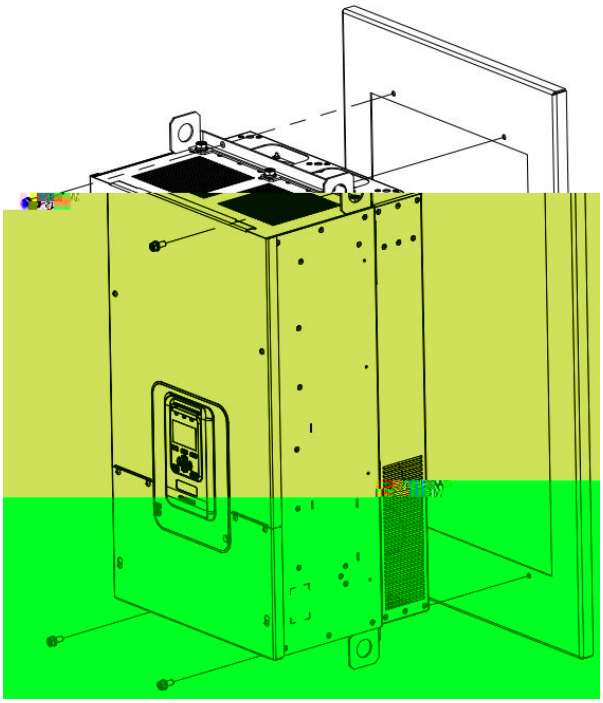

F1
LOCREM
F2
ENTER
RUN
STOP
GUIDE
CHARGE

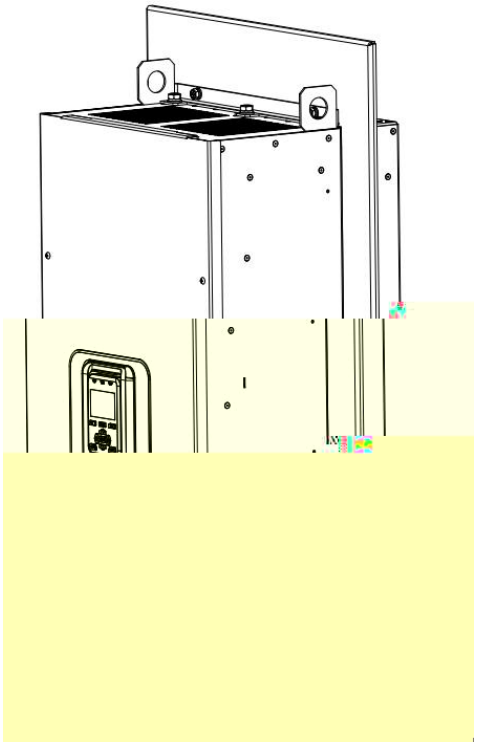


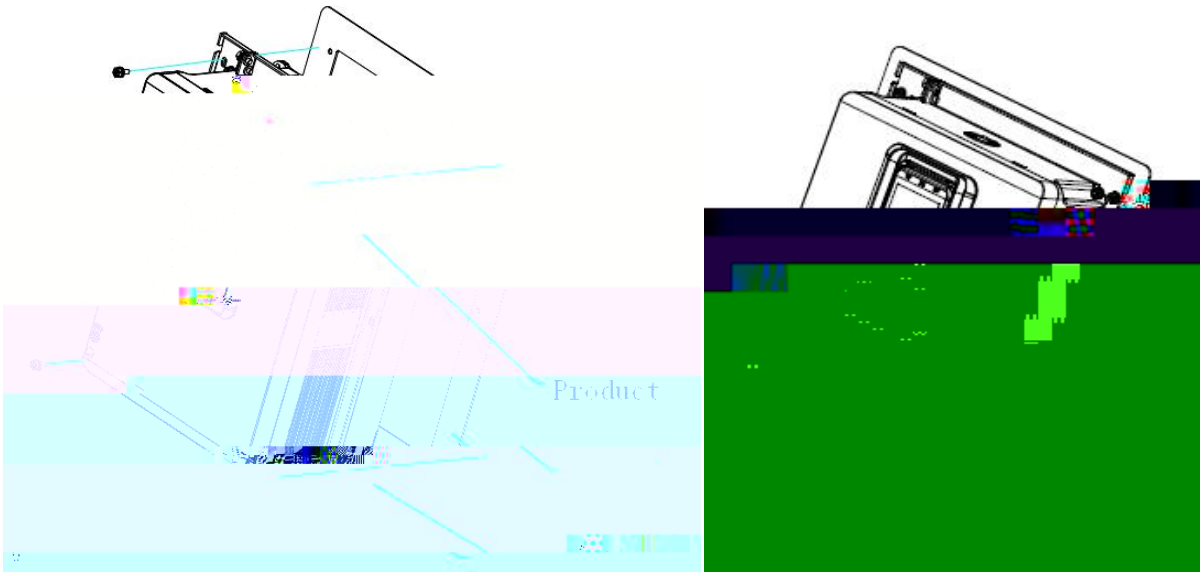

A
Air

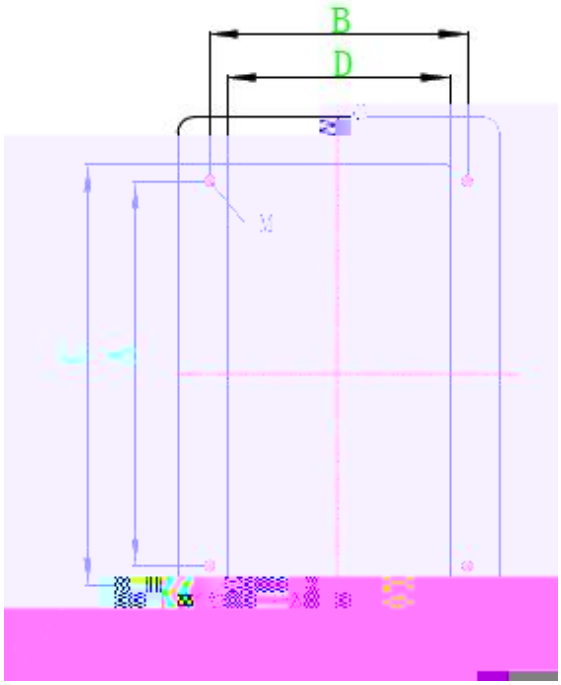

0.4kW~18.5kW
22kW~37kW
45kW~450kW

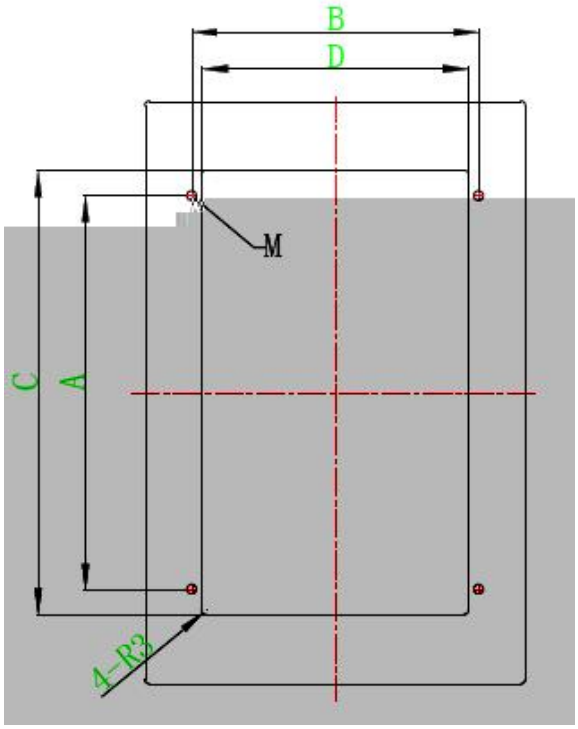


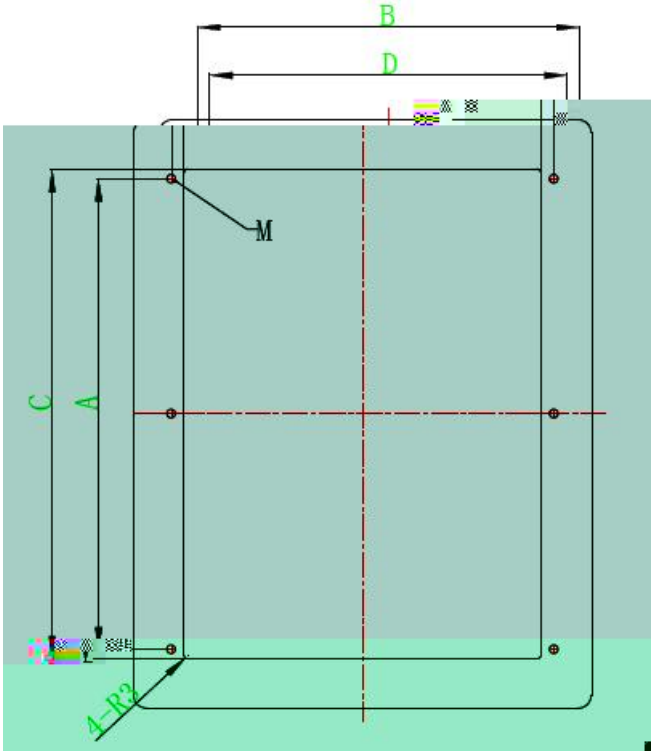


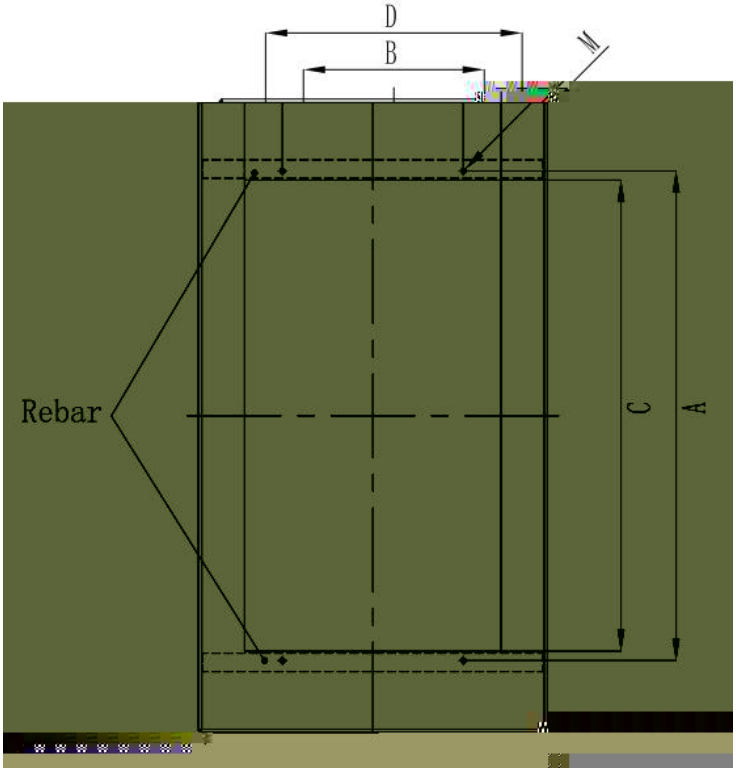


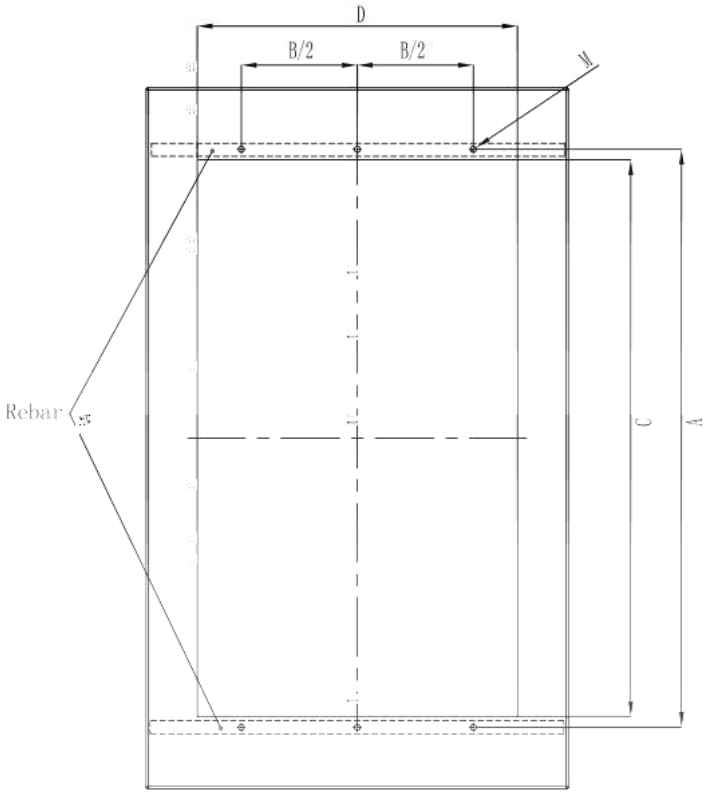

Product

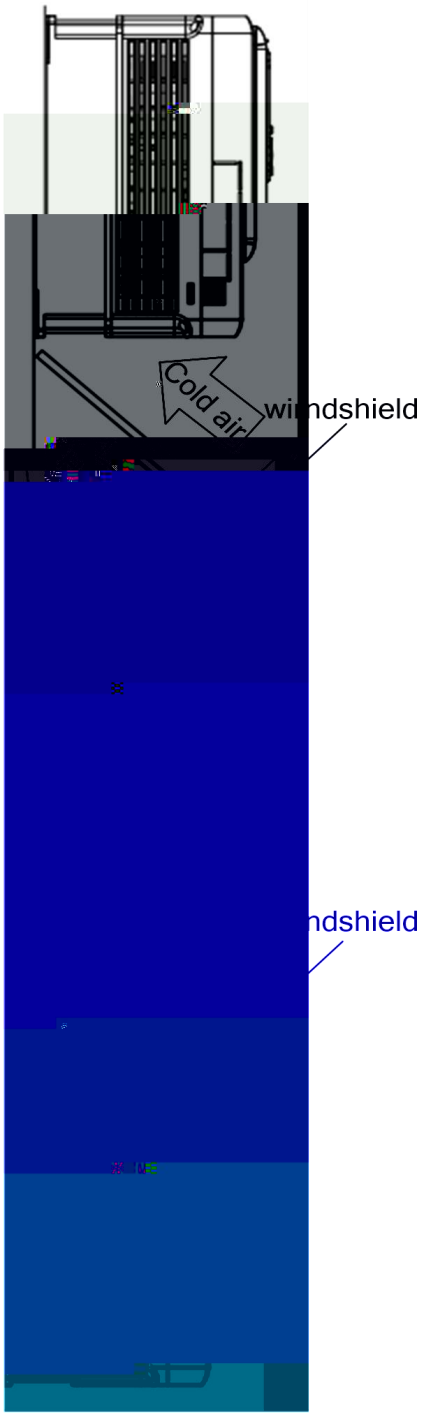

B
D


B
D
M
C
A
4-R3

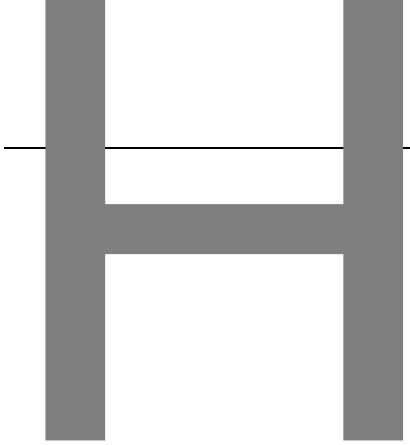

B
D
M
C
A
4-R3

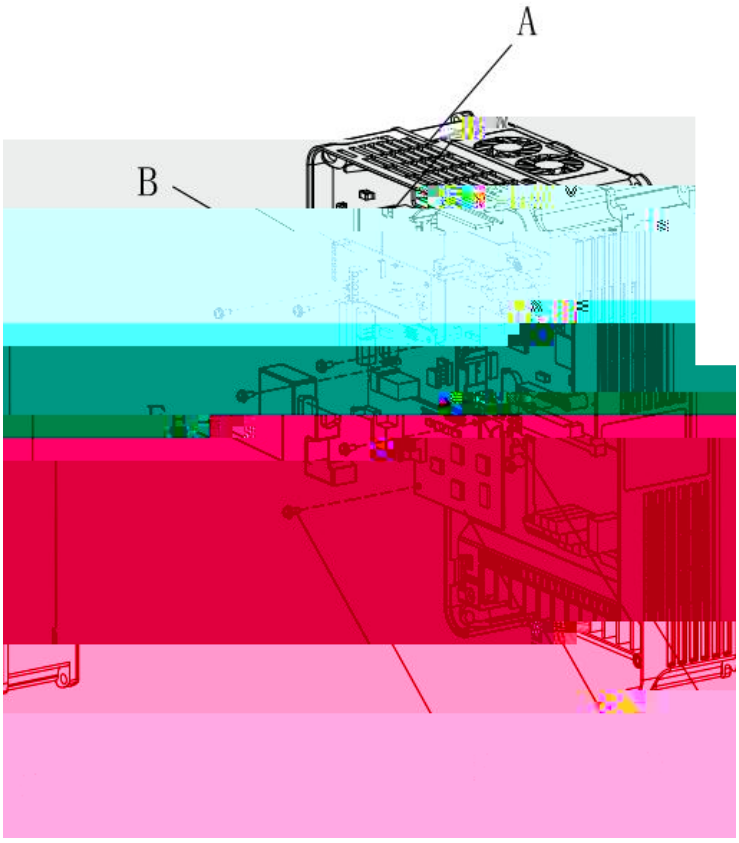

D
B
Rebar
C
A

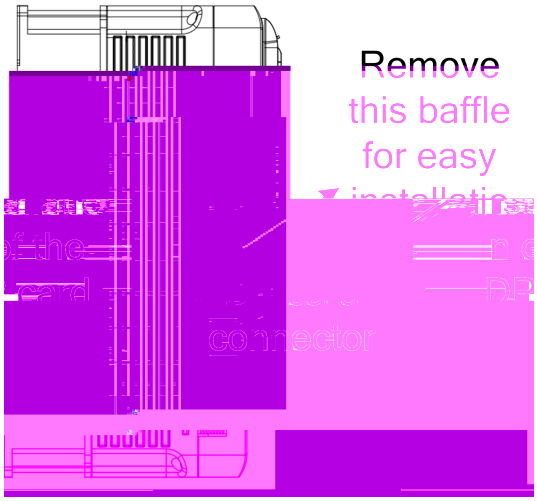

D
B/2
B/2
Rebar
C
A

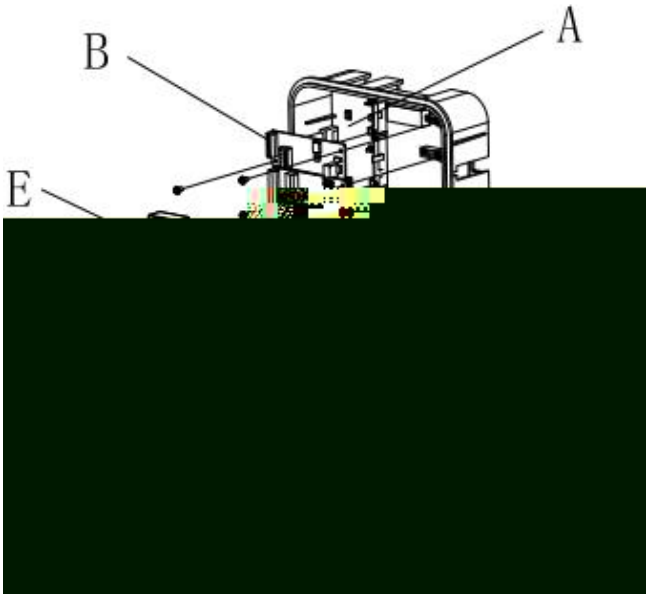

Cold air
windshield
ndshield

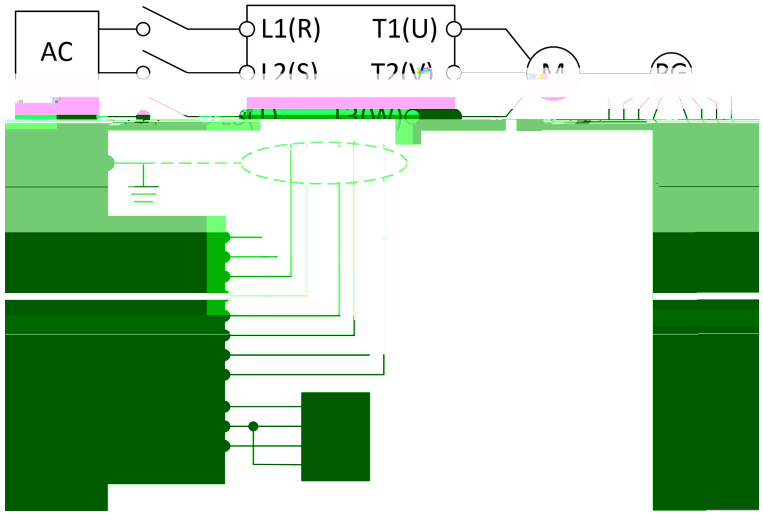
Hot air
Hot air

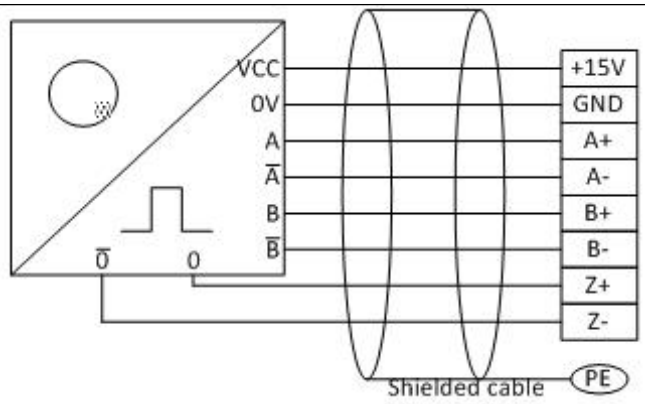


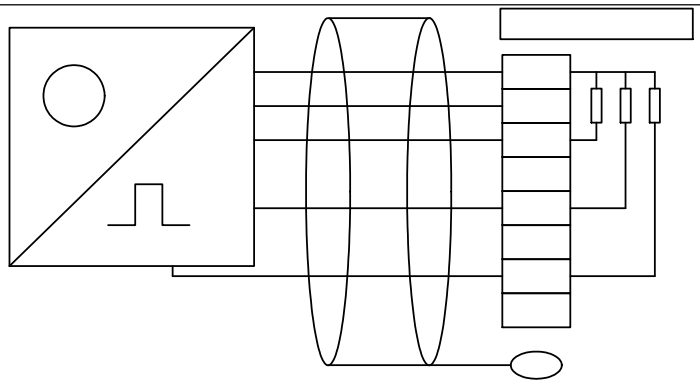

A
B

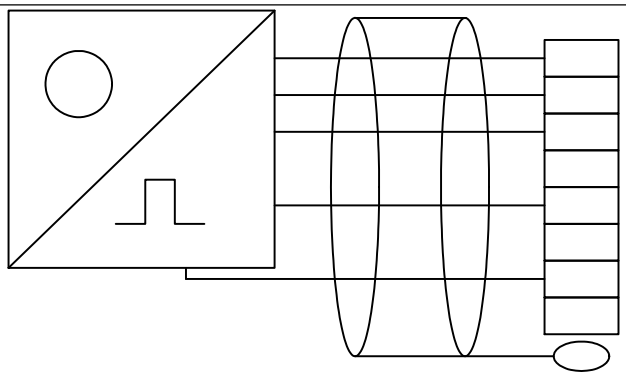

Remove
this baffle
for easy

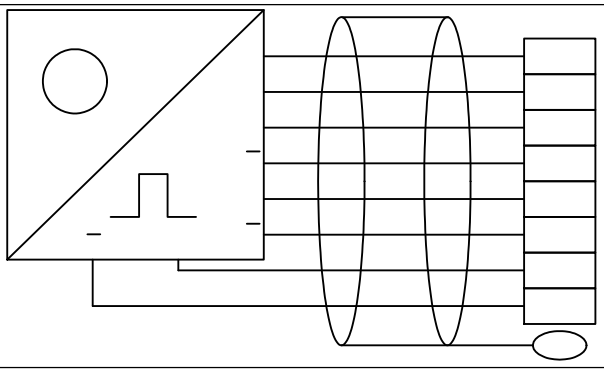

A
B
E

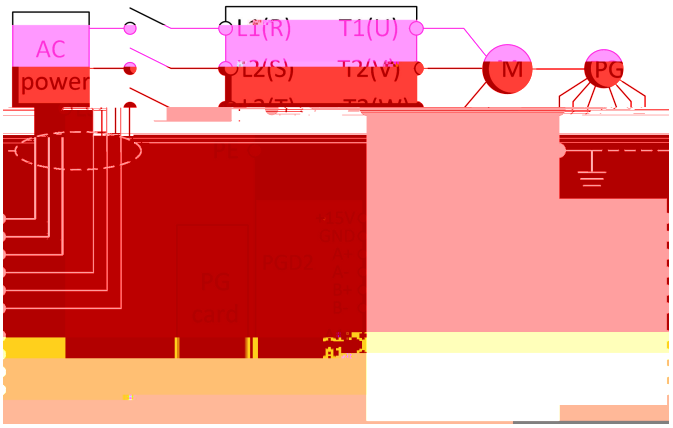

AC
L1(R)
T1(U)

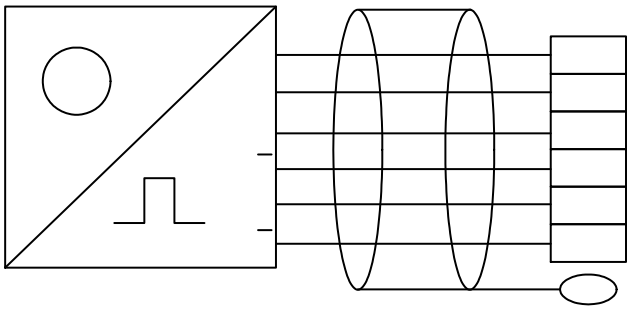
 VCC 0V A $\overline{A}$ B $\overline{B}$ $\overline{0}$ 0 +15V GND A+ A- B+ B- Z+ Z- Shielded cable PE		

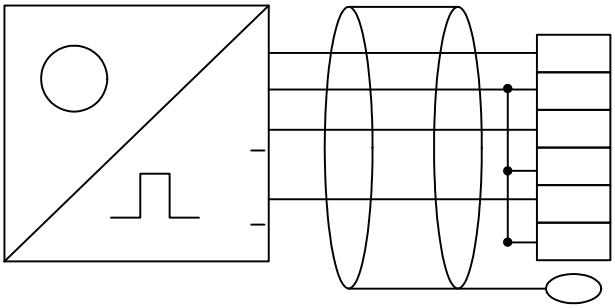
		

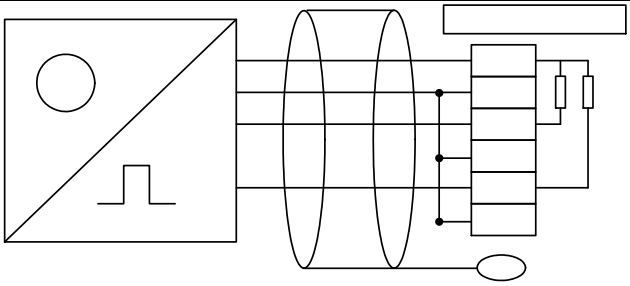
		

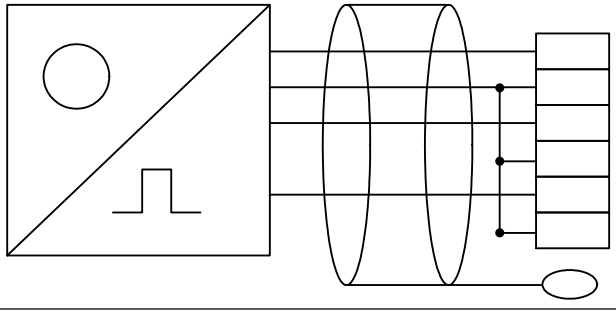
		

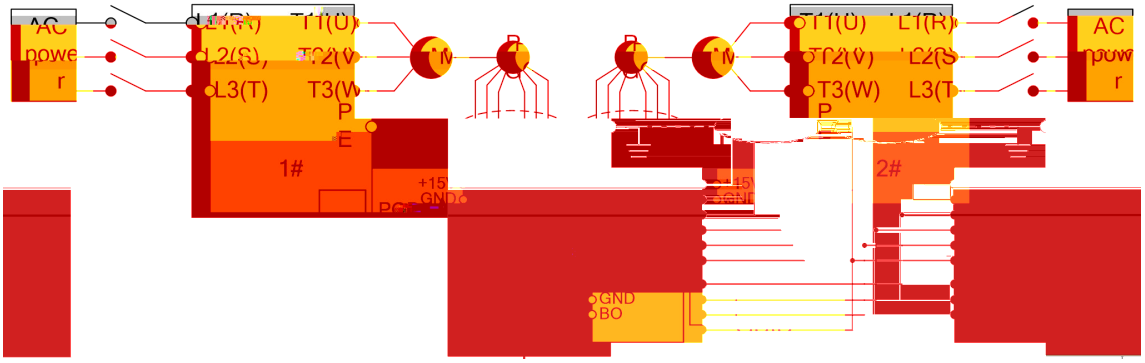

AC
power
L1(R)
T1(U)
L2(S)
T2(V)
M
PG

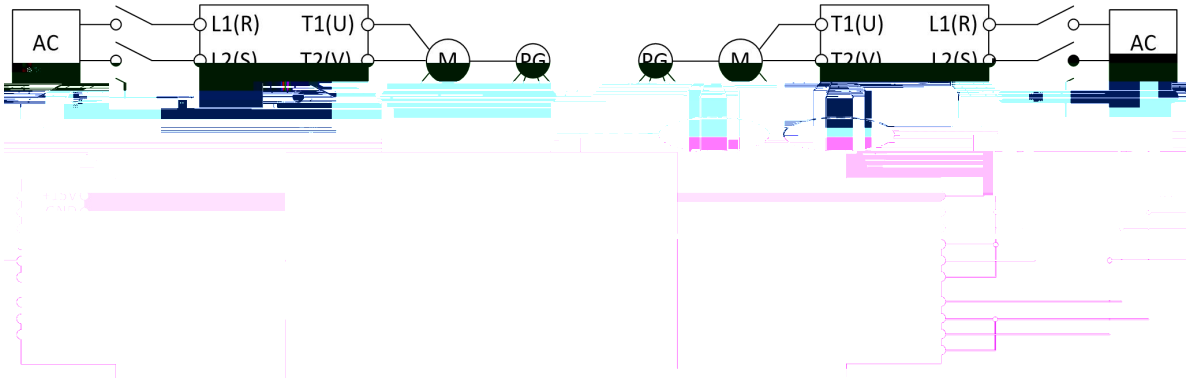
	

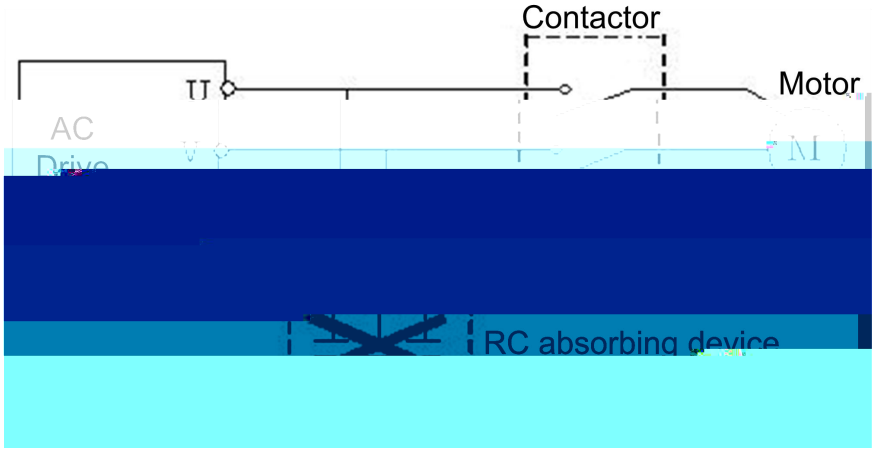
	

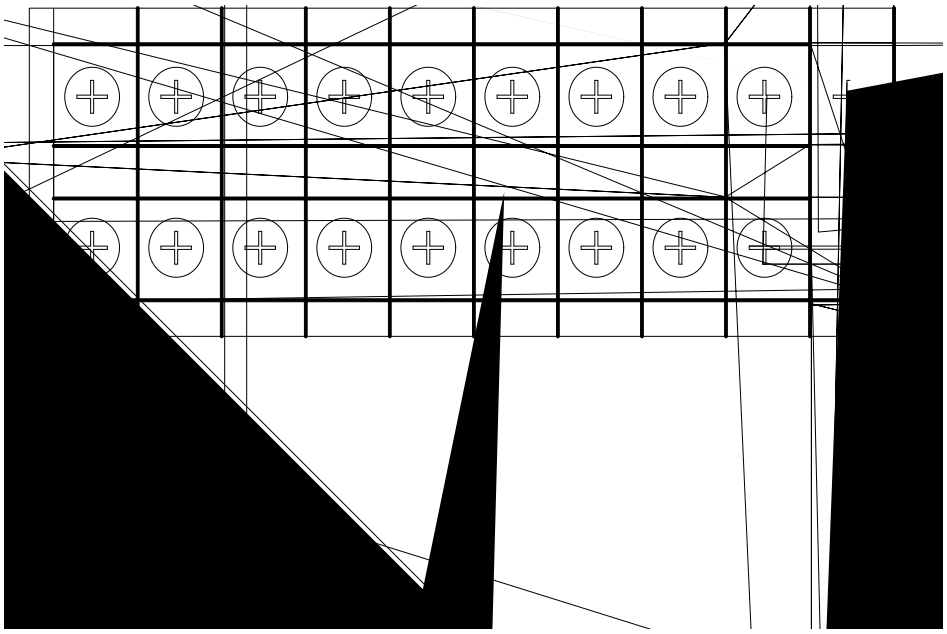
	

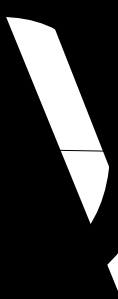
	

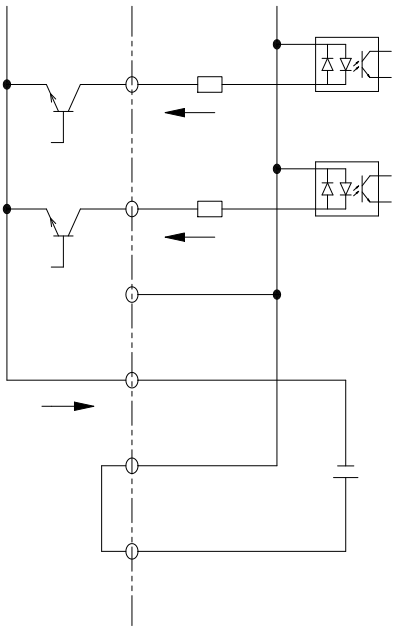

AC
power
L1(R)
L2(S)
L3(T)
T1(U)
T2(V)
T3(W)
P
E
1#
+15
GND
GND
BO
2#
AC
power

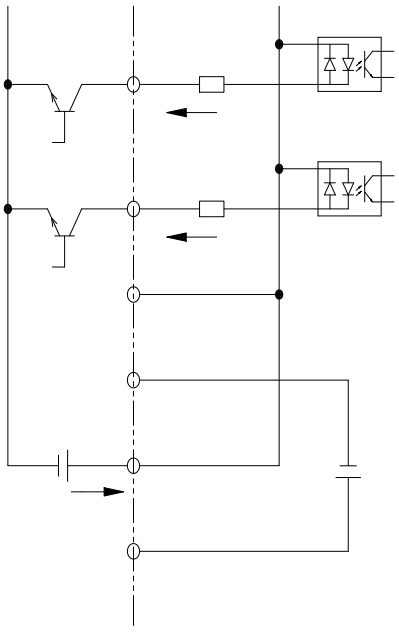

AC
L1(R)
T1(U)
L2(S)
T2(V)
M
PG
PG
M
T1(U)
L1(R)
T2(V)
L2(S)
AC


Contactor
Motor
AC
RC absorbing device





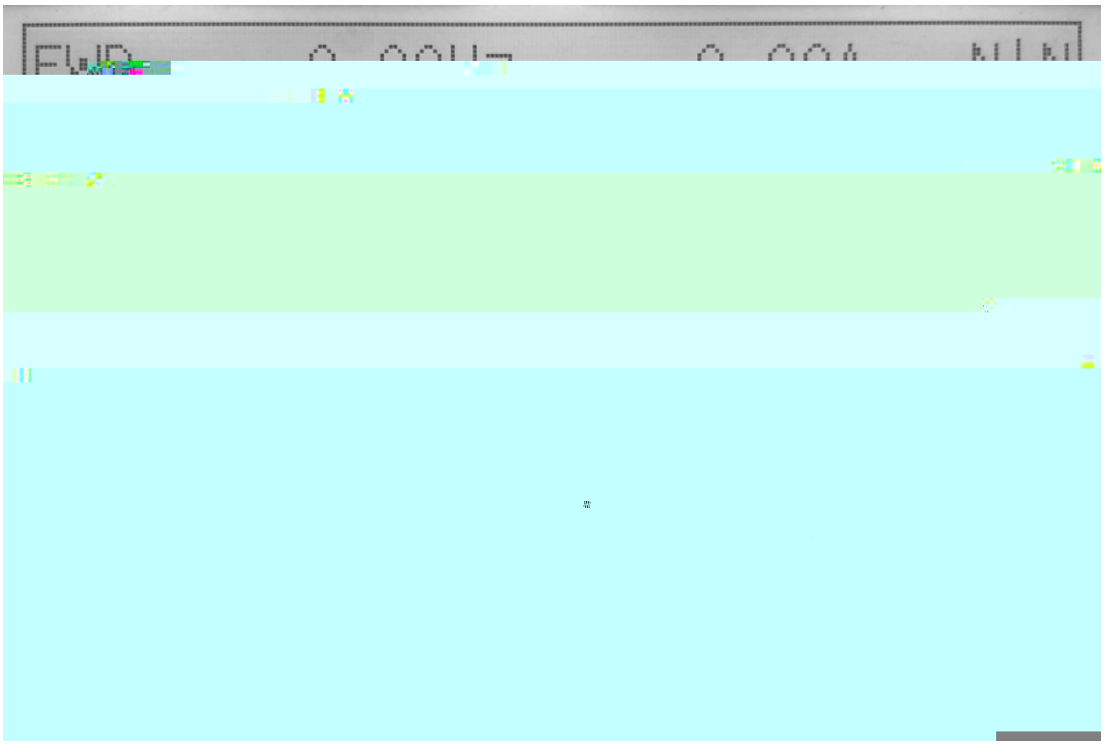


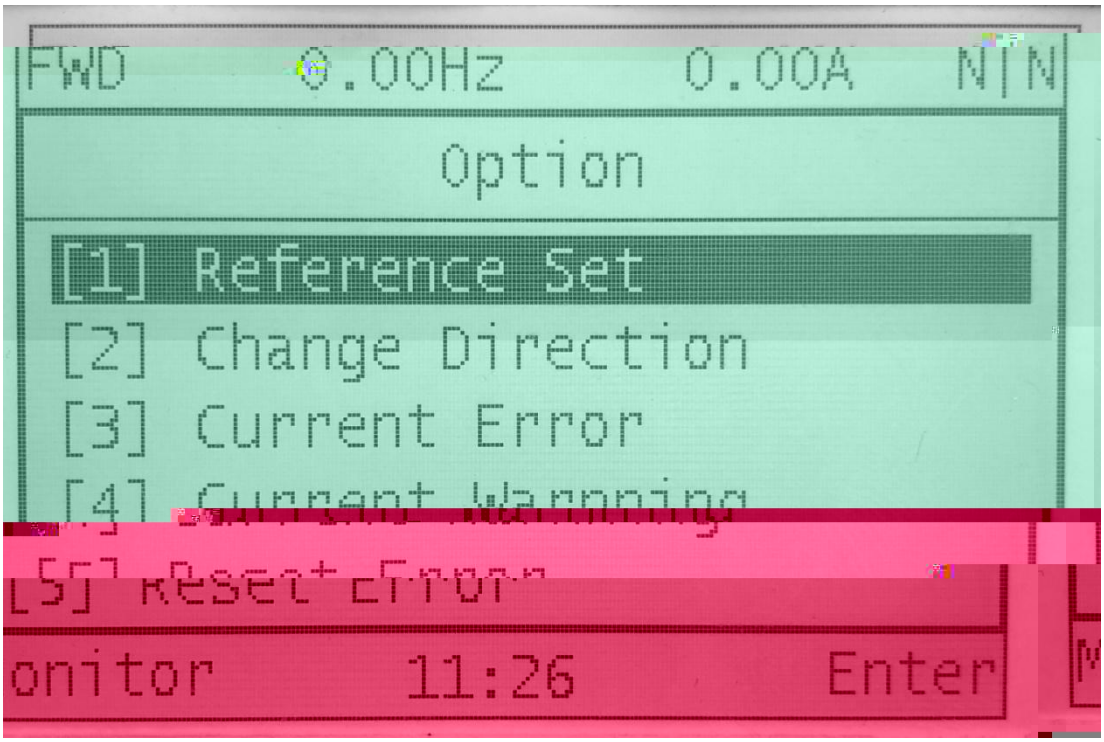


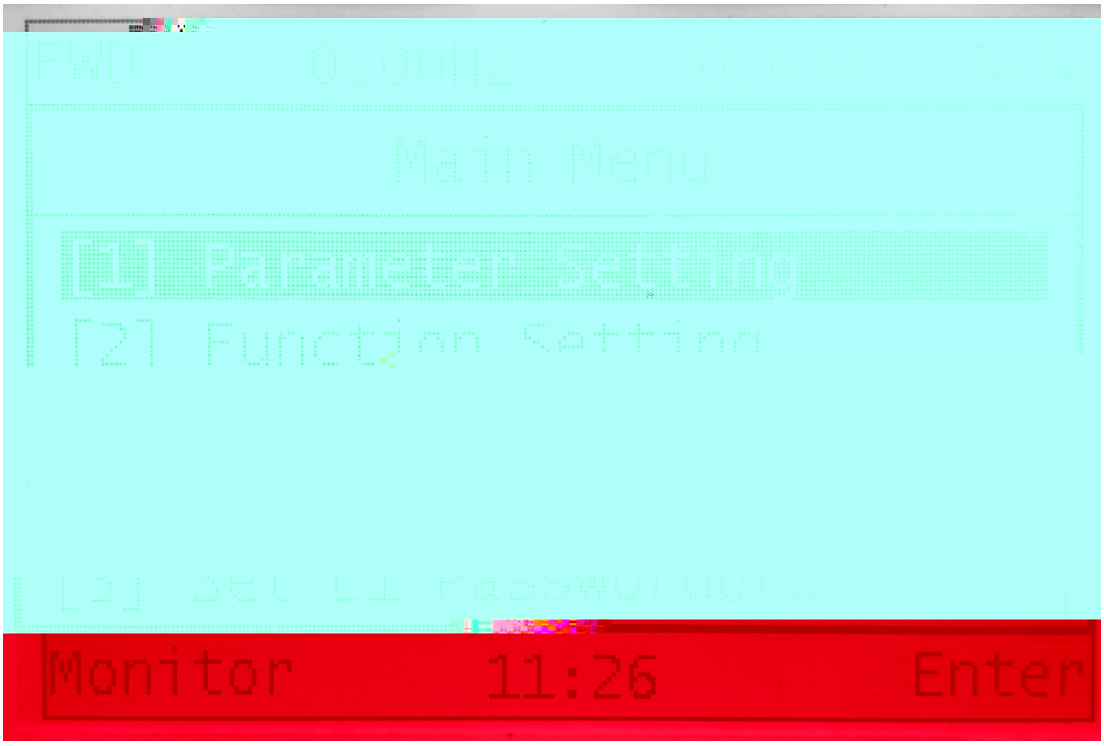
H

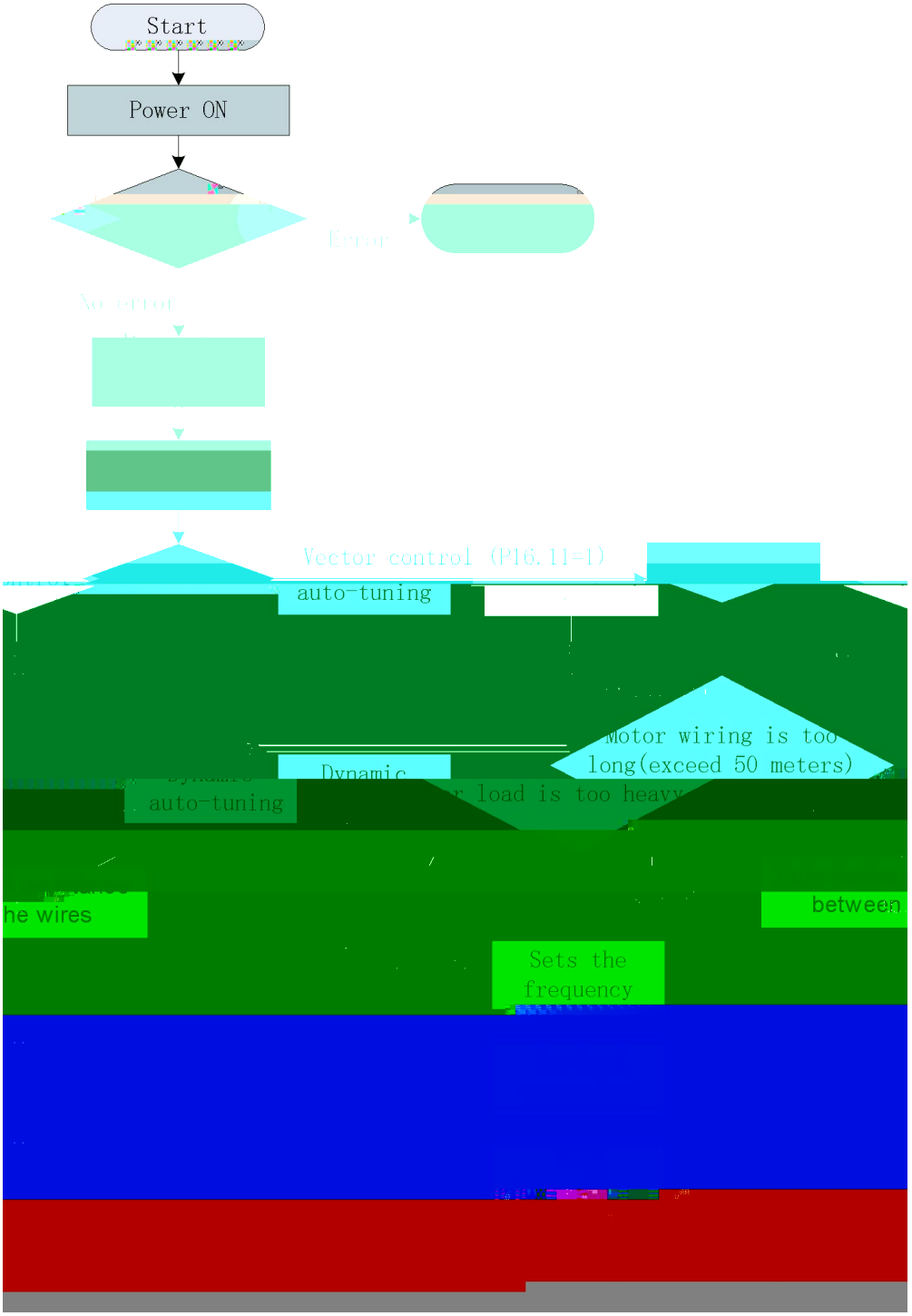
GUIDE

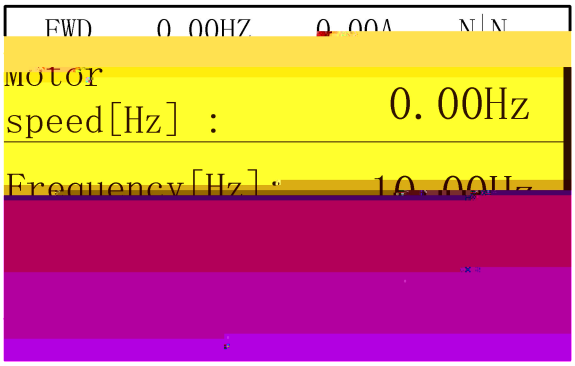
RUN
LOCAL
FAULT
F1
LOC/REM
F2
ENTER
RUN
STOP


FWD

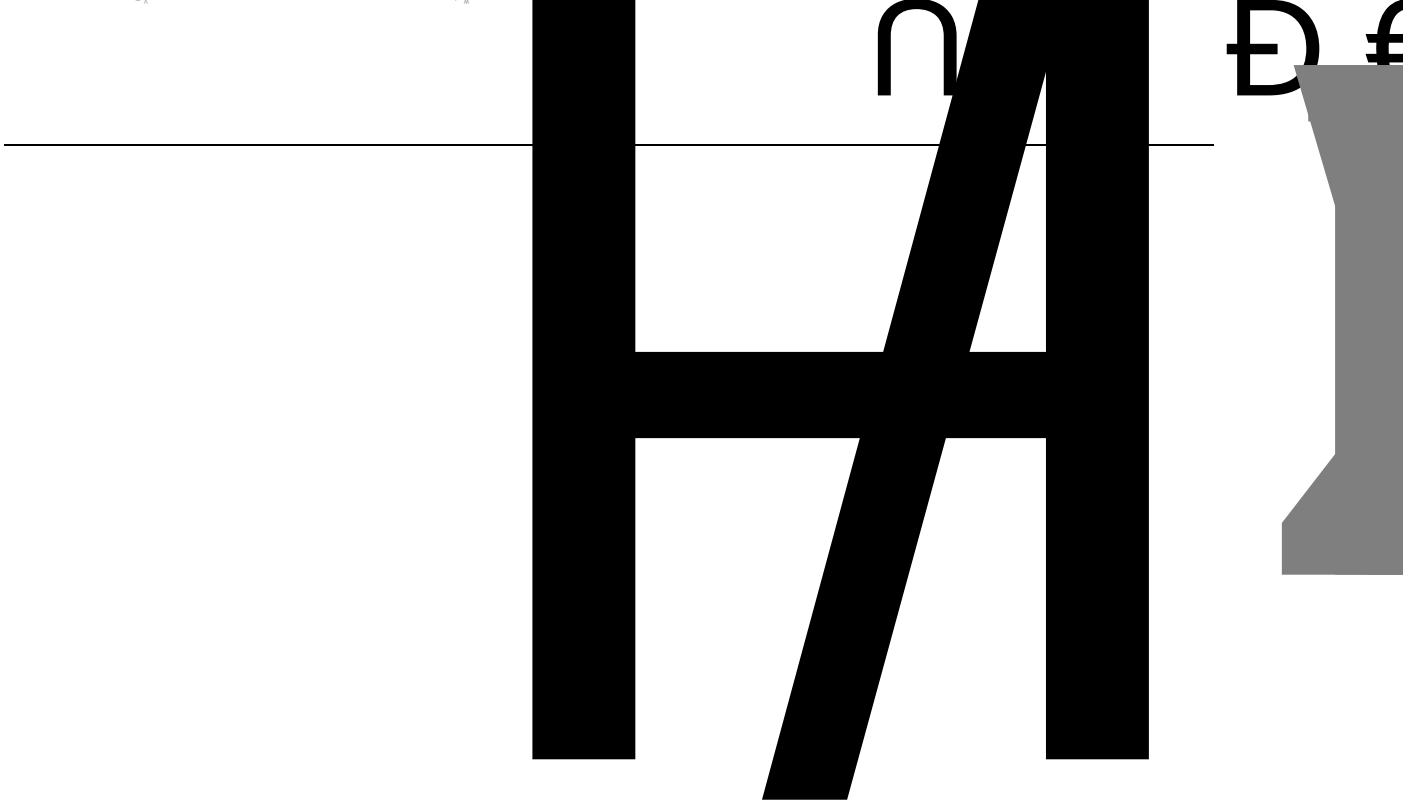

FWD
0.00Hz
0.00A
N N
Option
[1] Reference Set
[2] Change Direction
[3] Current Error
[4] Current Warning
[5] Reset Error
onitor
11:26
Enter


Main Menu
[1] Parameter Setting
[2] Function Setting
Monitor
11:26
Enter


Start
Power ON
Error
No error
Vector control (P16.11-1)
auto-tuning
Motor wiring is too
long(exceed 50 meters)
Dynamic
auto-tuning
between
Sets the
frequency


FWD 0.00HZ 0.00A N|N
Motor
speed[Hz] : 0.00Hz
Frequency[Hz]: 10.00Hz

FWD 0.00Hz 0.00A N|F



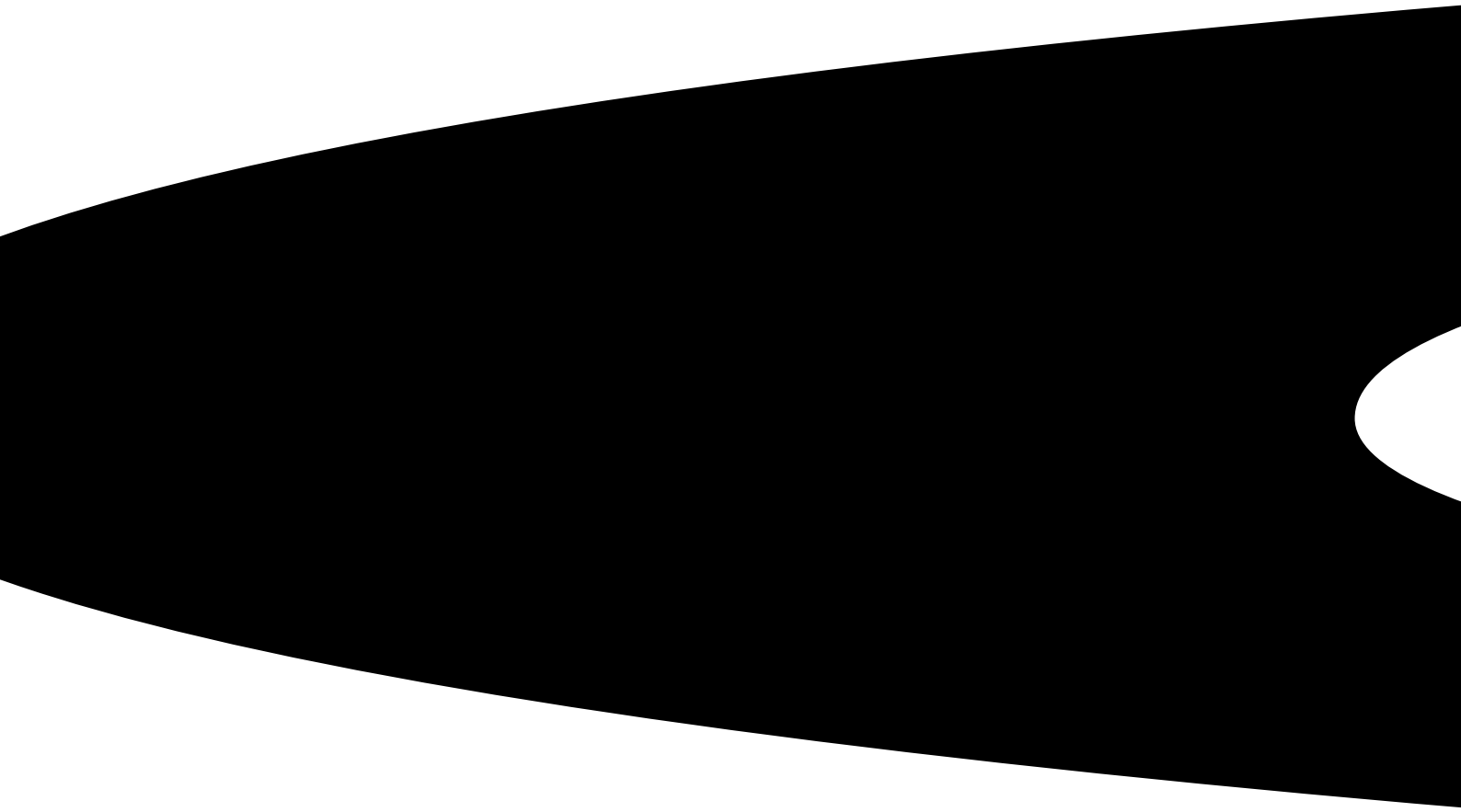
3

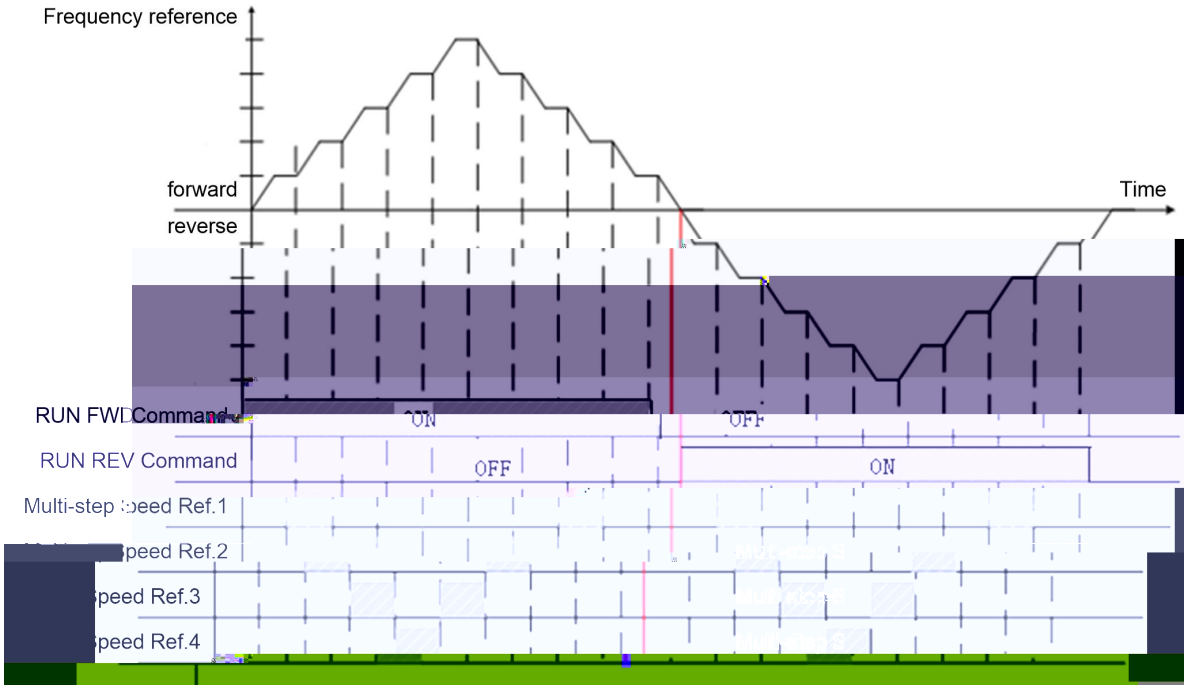
GUIDE

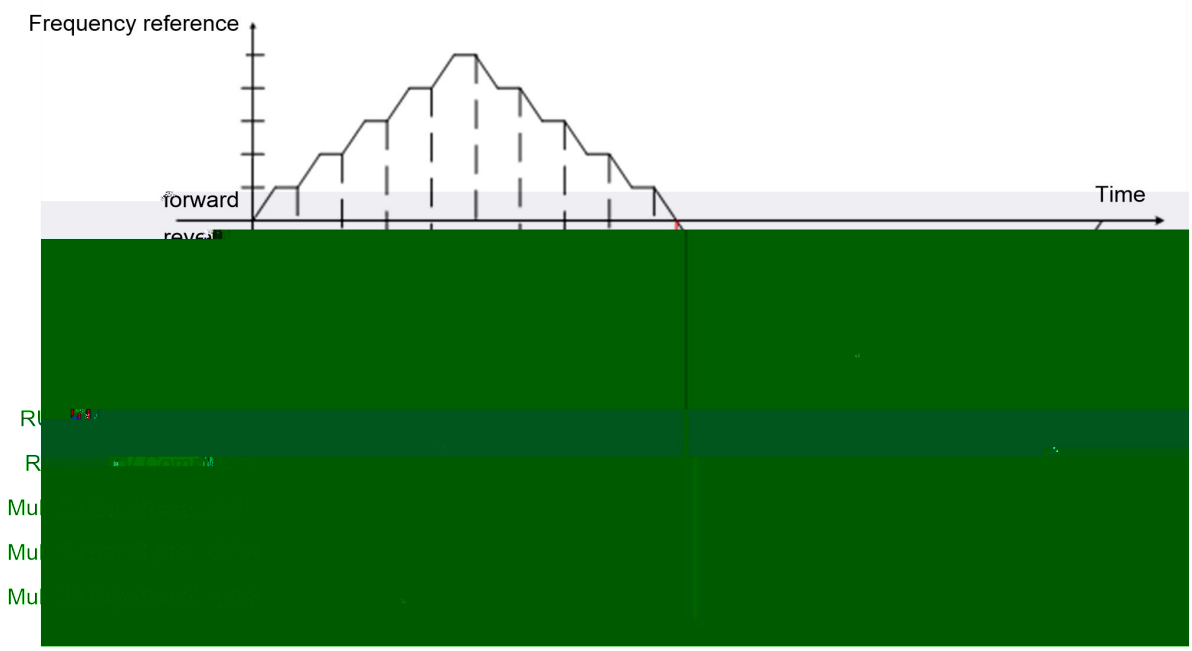
GUIDE

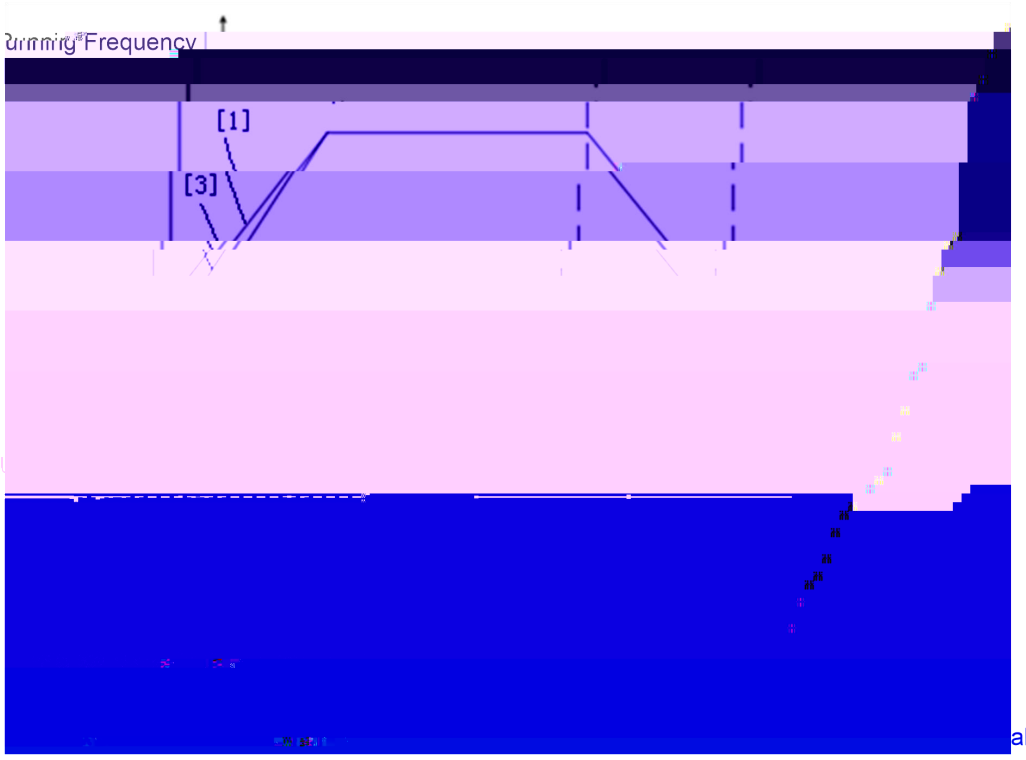
JK

JK



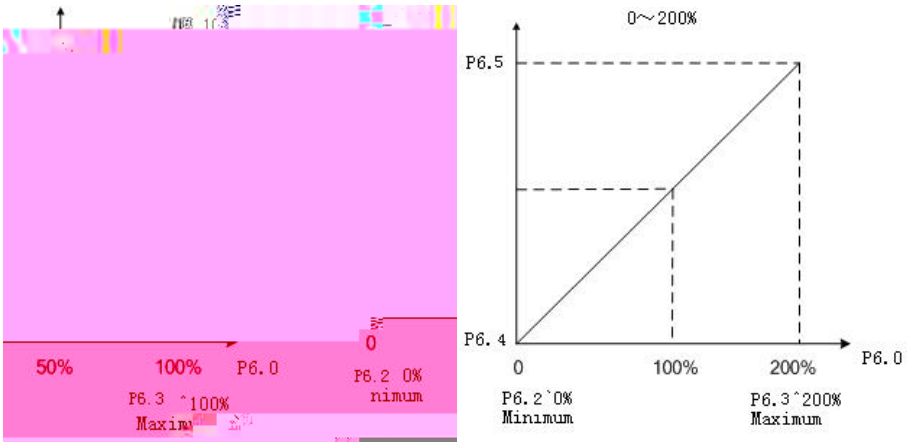

Frequency reference
forward
reverse
Time
RUN FWD Command
ON
OFF
RUN REV Command
OFF
ON
Multi-step Speed Ref.1
Speed Ref.2
Speed Ref.3
Speed Ref.4

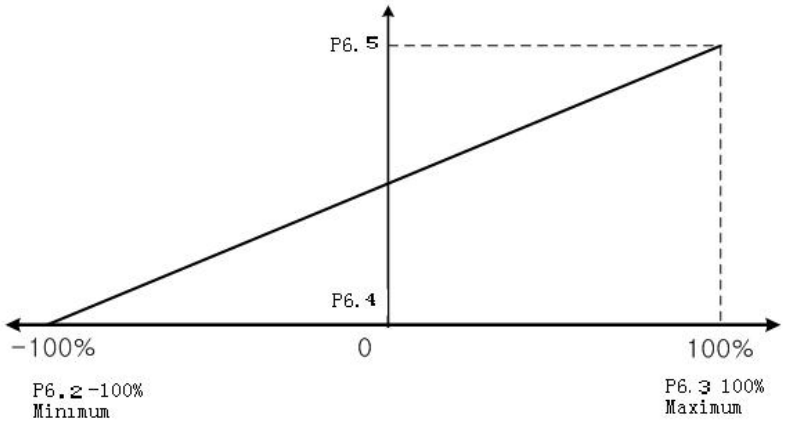

Frequency reference
forward
Time


Running Frequency
[1]
[3]

al.

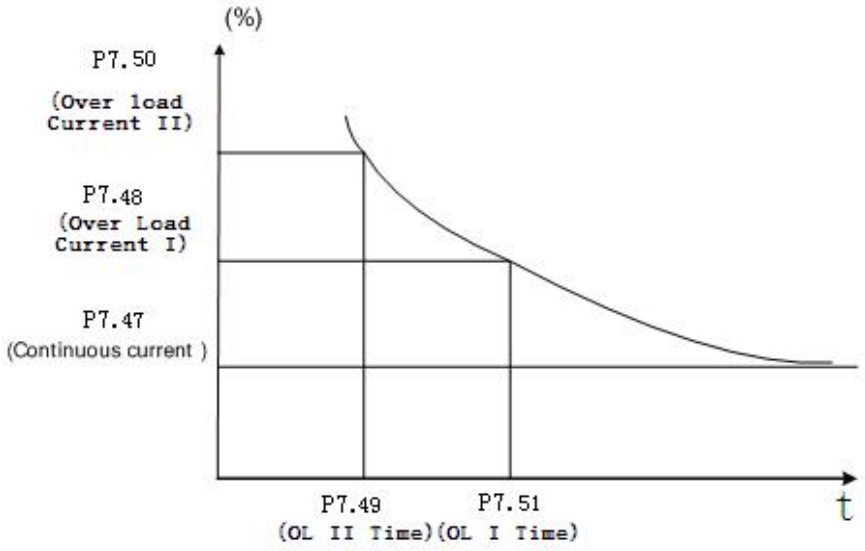
Reference
P5.9 (MAX)
Reference
P5.9 (MAX)
Setting with offset


0～200%
P6.5
P6.4
0
100%
200%
P6.0
P6.2`0%
Minimum
P6.3`200%
Maximum
50%
100%
P6.0
0
P6.3 `100%
Maxim
P6.2 0%
nimum

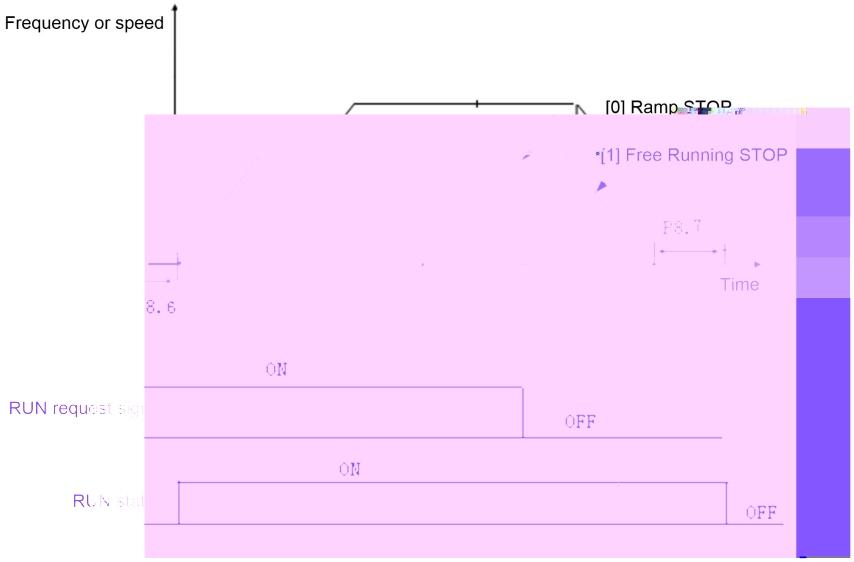

P6.5
P6.4
-100%
0
100%
P6.2 -100%
Minimum
P6.3 100%
Maximum

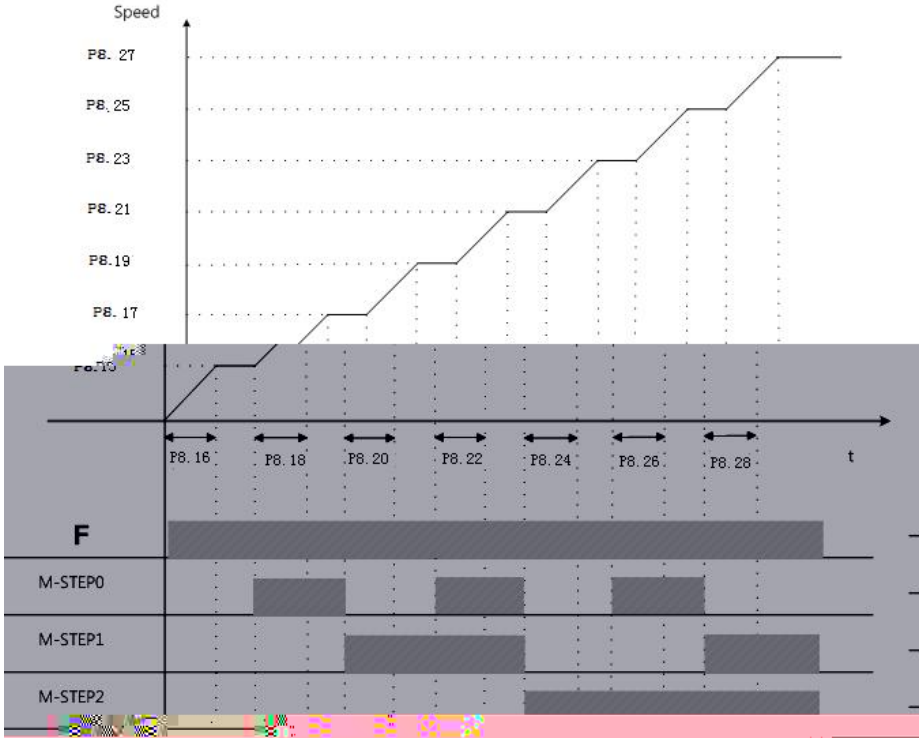
$$\mathrm{I}_a + I_b + I_c$$

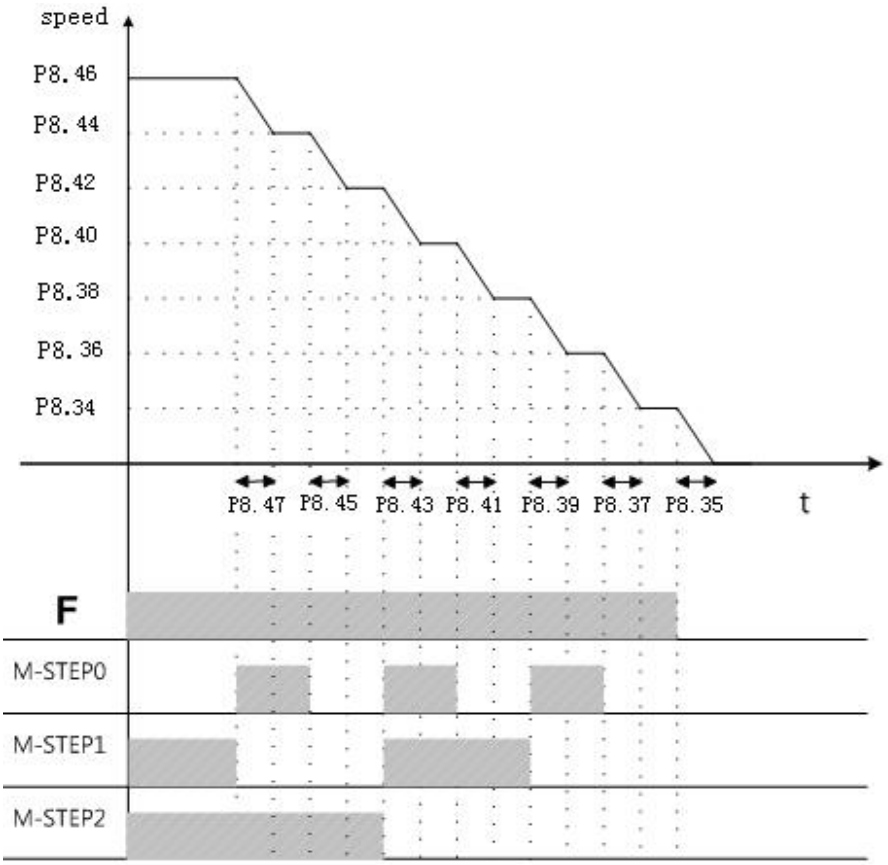
$$\frac{(\mathrm{I}_a + I_b + I_c)}{3} > P7.8 \quad P16.4 \quad 1.414$$

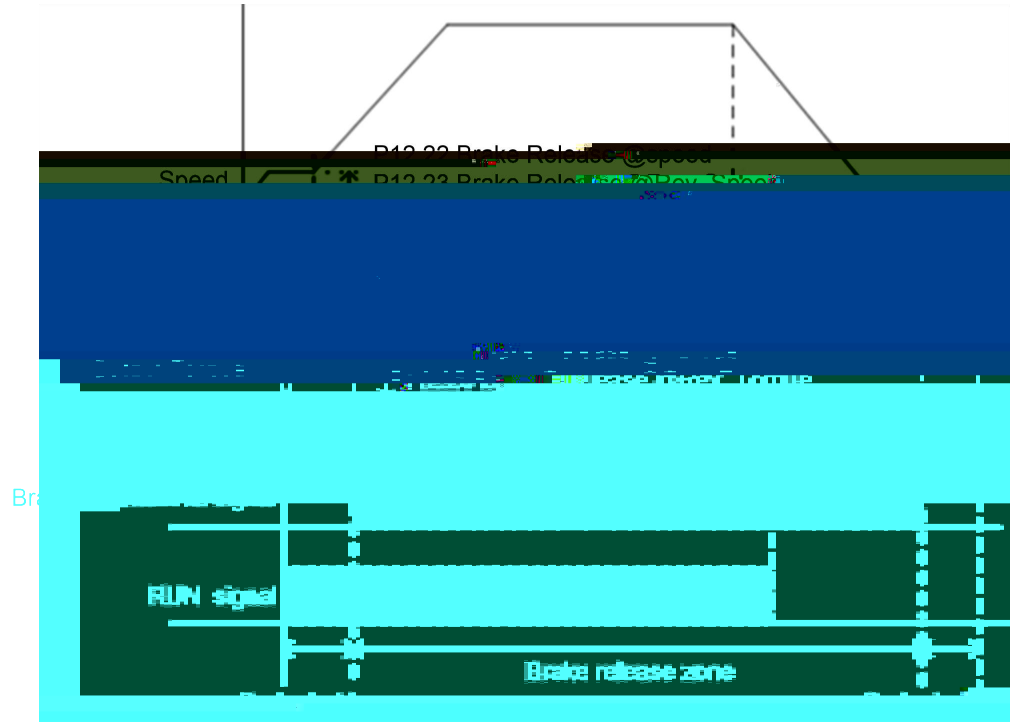

(%)
P7.50
(Over load
Current II)
P7.48
(Over Load
Current I)
P7.47
(Continuous current)
P7.49
(OL II Time)
P7.51
(OL I Time)
t

√ P16 20 P7.65

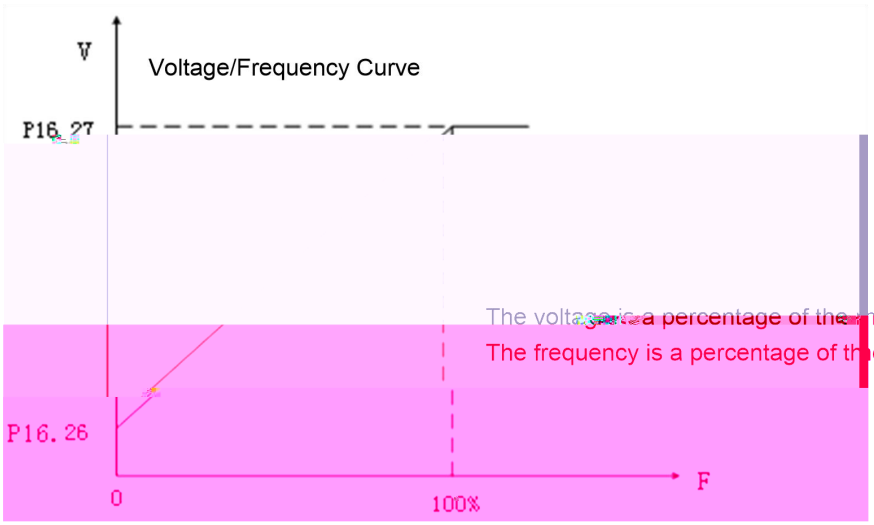

Frequency or speed
[0] Ramp STOP
[1] Free Running STOP
P8.7
Time
8.6
ON
OFF
ON
OFF

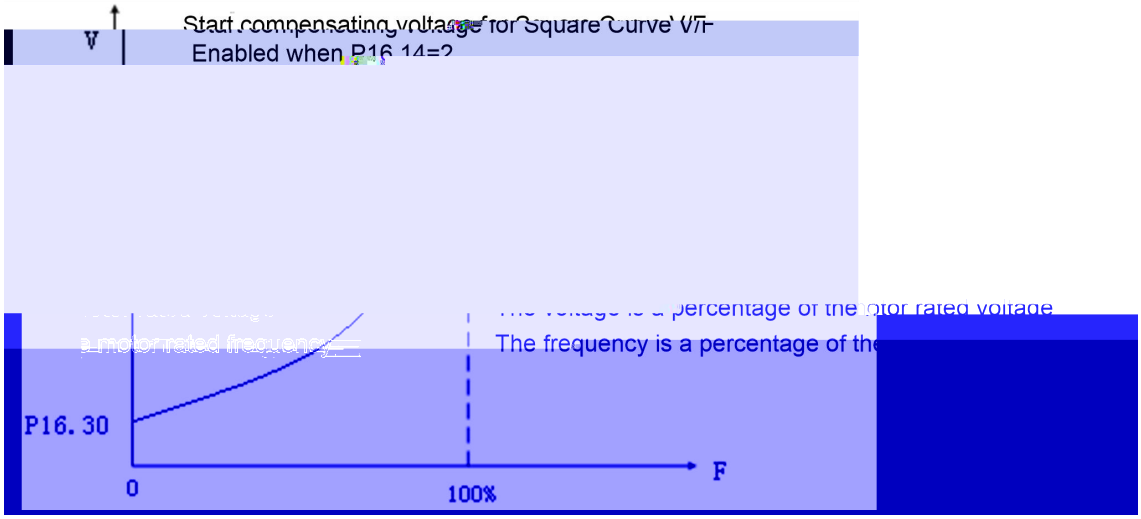

Speed
P8. 27
P8. 25
P8. 23
P8. 21
P8. 19
P8. 17
P8. 16
P8. 18
P8. 20
P8. 22
P8. 24
P8. 26
P8. 28
t
F
M-STEP0
M-STEP1
M-STEP2

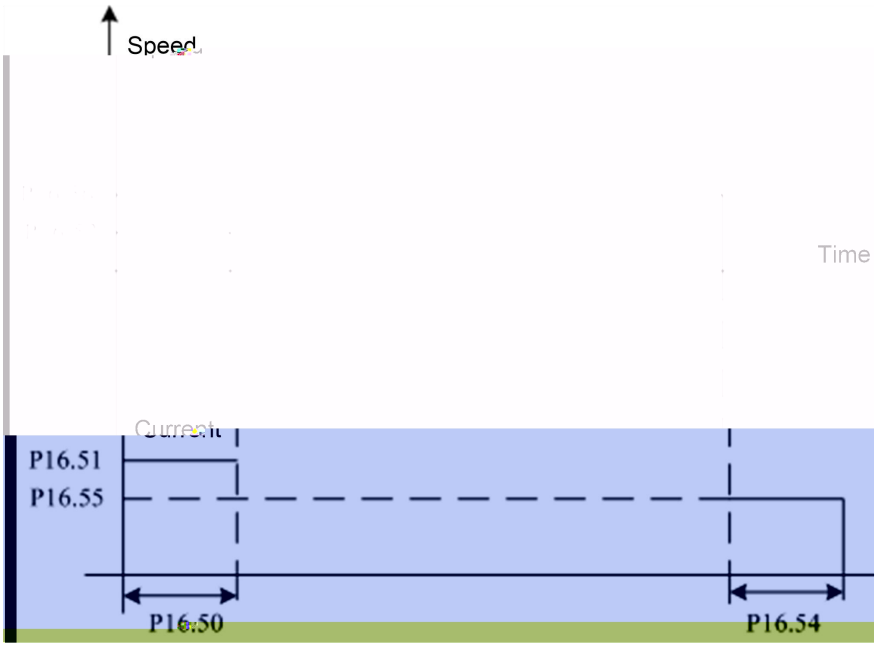

speed
P8.46
P8.44
P8.42
P8.40
P8.38
P8.36
P8.34
P8.47
P8.45
P8.43
P8.41
P8.39
P8.37
P8.35
t
F
M-STEP0
M-STEP1
M-STEP2

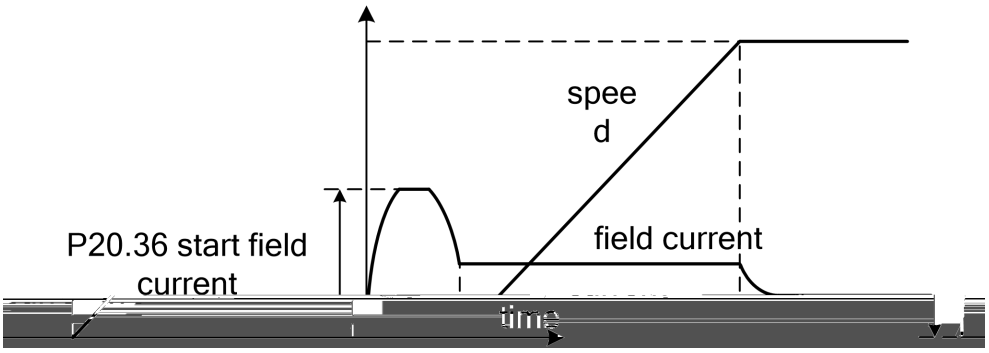

RUN signal
Brake release zone

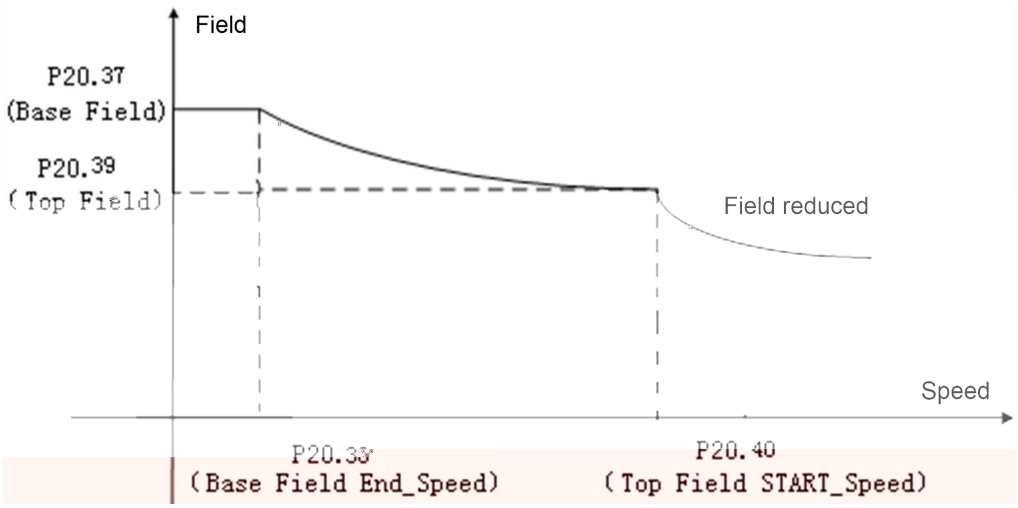
Speed

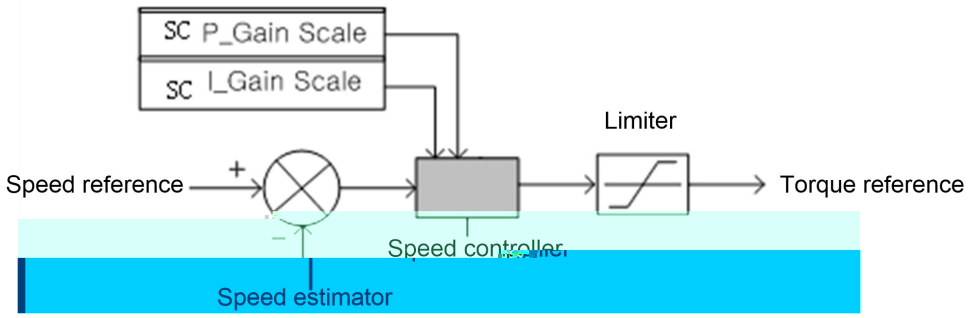

V
Voltage/Frequency Curve
P16.27
The voltage is a percentage of the motor rated voltage
The frequency is a percentage of the motor rated frequency
P16.26
0
100%
F

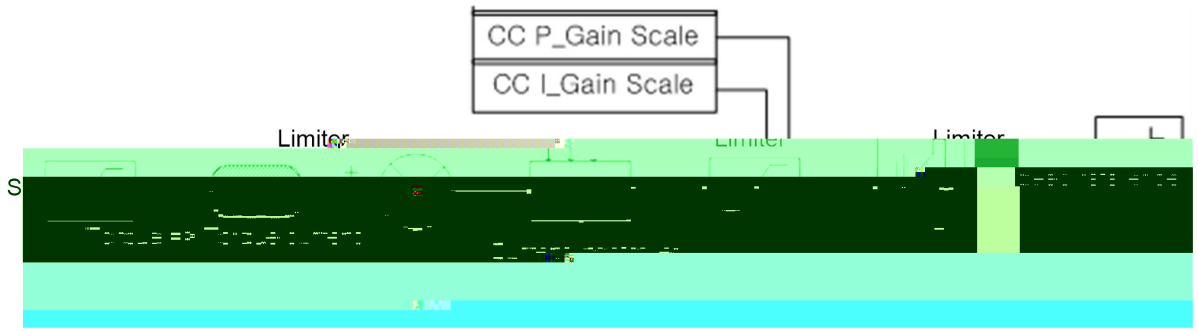

V
Start compensating voltage for Square Curve V/F
Enabled when P16.14=2
The frequency is a percentage of the
P16.30
0
100%
F


Speed
Time
P16.51
P16.55
P16.50
P16.54


spee
d
P20.36 start field
current
field current
time


Field
P20.37
(Base Field)
P20.39
(Top Field)
Field reduced
Speed
P20.38
(Base Field End_Speed)
P20.40
(Top Field START_Speed)


SC P_Gain Scale
SC I_Gain Scale
Limiter
Speed reference
+
−
Torque reference
Speed controller
Speed estimator


CC P_Gain Scale
CC I_Gain Scale
Limiter
Limiter
Limiter

GUIDE Inverter HF630-L(MT) Series

Technical Manual

Version: 1.06

Wuhan Guide Technology Co.,Ltd.

GDHF630L-E-DOC-UM-REV1.06

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