

Notice



1. Avoid any of places where have water, oil, dirt, or direct sunlight,
2. Avoid a sealed place or a place where has severe temperature increase,
3. Avoid places where has strong vibration or impacts,
4. Do not install it if the product is damaged in appearance or does not work when test driving,
5. Use power voltage and frequency within rating value,
6. Power cable should be tightened and grounded safely,
7. Install it after checking input voltage,
8. Be careful if foreign substances are not coming inside of the product,

- ※ Please read this manual carefully to before installing the product,
– Malfunction and accidents cause by improper installation,
- ※ Please use the proper cables and connect the wires to the tightening torque requirements,
– Overheating or fire could be occur,
- ※ Product installation and maintenance: leave it to a professional qualified,
– Malfunctions and accidents caused by incorrect installation,

The range of warranty

- In case of troubles that occurs within warranty period with a status that using and managing the product that you bought normally as the specifications of the operational manual that we have given, if it is found that it is because of quality of each component or faults of producing process by technical analysis, we repair those products without compensation,

Warranty period

- One of these, for 18 months from the produced day, or for a year from the bought day, that comes first is considered to an expiration of warranty period,

Exceptions of warranty

- We do not warranty it if it is applied one of these exceptions even though within warranty period,
1. Breakdown from random modification,
 2. Damage from excessive driving or mistakes from users,
 3. Using product with extra usages from normal,
 4. Product that is damaged its product number,
 5. Consumables such as fuse, etc,
 6. Troubles from improper choice,
 7. Putting on too much voltage out of range or breakdowns from lightening or flood, etc,
 8. Breakdowns from natural disasters,
 9. Non-operation expenses except applied components and wages when warranty repairing,
i.e., expenses such as transportation, staying, stoppage loss or taxes and the public utilities' charge,



Thanks for choosing **EASYcon**.
EASYcon softly operates induction motor as an economical model of soft starter.
 It is easy to control by 3 volumes (acceleration time, starter torque, deceleration time) and optimized to operate motor.
 In case of use, you must use EOCR and protective relay.



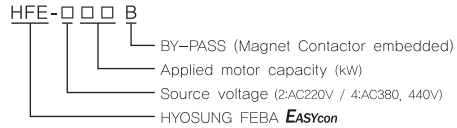
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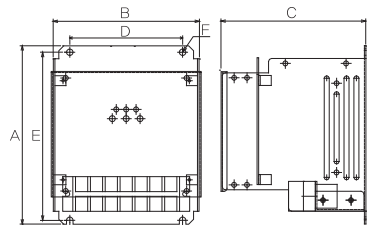
- ※ Contents of this instructions can be modified for quality improvement,
- ※ Please be sure to be well-informed of this instructions before using the product,

► Name Form of Products & Specification



Basic specification	Description
Power voltage	AC 3Φ 220V, 380V, 440V +10%, -15% 50/60Hz ±5%
Operating power	AC 110V~220V 50~60Hz ±5%
Usage place	Indoor (Place without corrosive gas, dust, etc)
Surrounding temperature	-10 ~ +50℃
Humidity	Under 90% RH (no dew)
Power noise	Square wave input by noise simulator R phase, T phase ± 2000V 1us (between power terminals)
Cooling type	Natural cooling by heat sink
Insulation resistance	Over 1000V 5MΩ

► Product Size



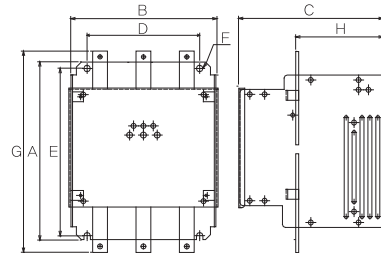
unit : mm

Vac	kW	A	B	C	D	E	F	G	H
220	2,2~11kW	180	147	146	114	169,5	6,5		
380, 440	3,7~22kW								

► Order Name of Product

HFE	4	45	B
EASYcon	Voltage	Model	Type
	CODE Voltage(V)	CODE Model(kW)	CODE Type
	2 220	02 2,2	B BY-PASS
	4 380,440	03 3,7	
		05 5,5	
		07 7,5	
		11 11	
		15 15	
		18 18	
		22 22	
		30 30	
		37 37	
		45 45	

※Notice) MODEL 30,37,45 are for 380V, 440V
 ※Notice) MODEL 02 is for 220V

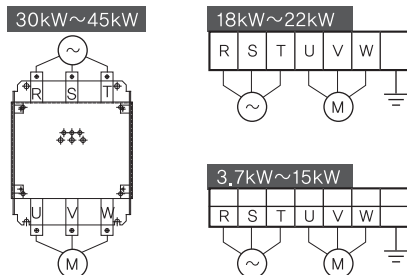


unit : mm

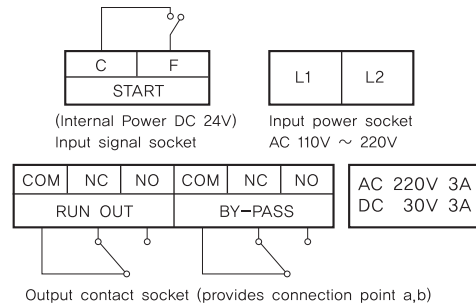
Vac	kW	A	B	C	D	E	F	G	H
220	15~22kW	180	147	146	114	169,5	6,5	200	89
380, 440	30~45kW								

► Connection Diagram – Line

※ The bottom capacity(kW) is standard of 440V
 ※ AC 3Φ (220V~440V)



► Connection Diagram – Control

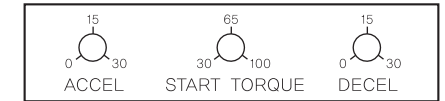


► Sign Lamp



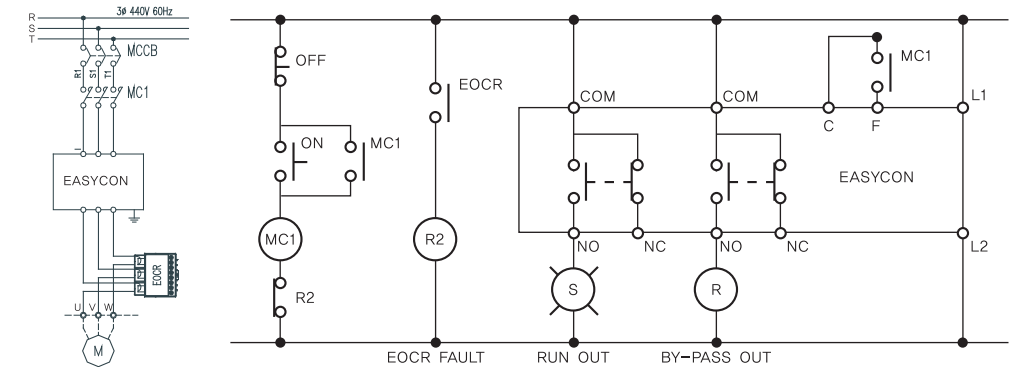
If input power is provided, CONTROL lamp is on.
 If main power is provided, POWER lamp is on.
 During acceleration or deceleration, RUN lamp is off.
 During operation, RUN lamp is on

► Setting Volume



ACCEL : setting acceleration time 0~30sec.
 START TORQUE : setting early starter 30~100.
 DECEL : setting deceleration time 0~30sec.

► Legend



► Cautions for installation and test working

● Attachment

- Watch your surroundings when moving the product,
- Avoid places where it is too humid, too much dirt or too hot and where it has oil or water,
- Keep it where it is easy to repair and inspect, and keep extra products near control panel,

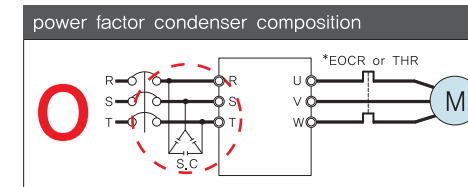
● External Wiring

- Use power capacity and main circuit power to fit the load,
- Connect wires after checking as problem occurs if the rating is wrong,
- Connect order input wire separating with electric power circuit,

● Check rated voltage and capacity

- Rated power and input power of the product must be same,
- Check capacity of the product and capacity of the motor,

● Check output terminal of DRIVER



● Check points before power-up.

- Check one more time if there is any wrong wiring before power-up,
- Check if socket and screws are well-tightened,
- Check if there is any over wiring,

● Check Surroundings

- There must be no foreign substances, (Danger of short)

● Check condition of input/output cable connection.

- R,S,T socket : connect main power
- U,V,W : connect motor

