

## FRENIC-EcoPAK

Fuji Electric's FRENIC-EcoPAK series provides a compliant and competitive packaged drive solution.



## Submittal Summary



### Fuji Electric Corp. of America (FECO) Variable Frequency Drives – HVAC Systems

#### Submittal Summary Data Form – UL/NEMA 3R Non-Bypass Systems

Project: \_\_\_\_\_

Architect: \_\_\_\_\_ Engineer: \_\_\_\_\_

Contractor: \_\_\_\_\_

Submitted By: \_\_\_\_\_ Date: \_\_\_\_\_

| Tag # | Model # | Unit Ratings (Voltage, HP, Rated Current) |
|-------|---------|-------------------------------------------|
|       |         |                                           |
|       |         |                                           |
|       |         |                                           |
|       |         |                                           |
|       |         |                                           |
|       |         |                                           |
|       |         |                                           |

#### Standard Features

- UL/NEMA 3R enclosure
- Metallic enclosures to reduce radio frequency interference (RFI)
- Integral main disconnect with branch circuit protection, including a padlockable through-the-door operator handle mechanically interlocked with the enclosure door
- 3% AC line reactor provided as standard below 100HP to minimize harmonics and provide transient voltage protection for the drive, with the option of a 5% AC line reactor. At 100HP and above, a DC link reactor is provided, with the option for adding a 3% or 5% AC line reactor
- Control power transformer with primary & secondary fusing
- Door mounted drive keypad with backlit LCD and LED displays for drive set-up, troubleshooting, local operation control, maintenance indication, and operational indication
- 0-10Vdc or 4-20mA customer supplied analog input for remote speed reference
- 0-10Vdc or 4-20mA analog output for indication (programmable)
- Safety Interlock, Run, Enable, and Fireman Override Inputs
- Damper Control Output Contacts
- Drive Run and Fault Status Outputs
- Built-in communications, user selectable between Modbus RTU, Metasys<sup>®</sup> N2, or APOGEE<sup>®</sup> FLN (P1), with additional communication drive options including; LonWorks<sup>®</sup>, BACnet, DeviceNet, Profibus DP, and EtherNet
- UL/cUL Listed
- Enhanced Automatic Energy Savings, Reduces Power Consumption of Both the Motor *and* Drive
- LCD and LED Keypad, also Functions as a Copy Unit
- Quick-Start Programming Menu for Ease of Start-Up
- Power Monitoring from the Drive's Keypad
- Built-in PID Control with Sleep Function

# Non-Bypass General Specifications

## Environmental

|                                            |                                                                                                          |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Enclosure                                  | Type 3R                                                                                                  |
| Ambient Temperature                        | +14 to +104° F (-10 to +40° C)                                                                           |
| - High Ambient with Optional Fan Package   | +113°F (+45°C)                                                                                           |
| - Low Ambient with Optional Heater Package | -4°F (-20°C)                                                                                             |
| Storage Temperature                        | +5 to +140° F (-15 to +60° C)                                                                            |
| Humidity                                   | 5% to 95% with no condensation                                                                           |
| Altitude                                   | 0 to 3,300 ft. (1,000 m) without derating, derate output current by 1% for each additional 330 ft (100m) |

## Codes and Standards

|                                                        |
|--------------------------------------------------------|
| UL, cUL Listed per UL508A                              |
| Conforms to applicable NEMA ICS, NFPA, & IEC standards |

## Electrical

|                                     |                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input Voltage; Nominal - Phase      | 208VAC, 230VAC, 460VAC - 3 Phase                                                                                                                                                                                                                                                                                      |
| Input Voltage; Tolerance, Unbalance | +/-10%, <3%                                                                                                                                                                                                                                                                                                           |
| Input Frequency                     | 60Hz +/-5%                                                                                                                                                                                                                                                                                                            |
| Displacement Power Factor           | >0.97                                                                                                                                                                                                                                                                                                                 |
| Output Voltage; Range - Phase       | 0 to maximum input voltage - 3 Phase                                                                                                                                                                                                                                                                                  |
| Output Frequency                    | 0.1 to 120Hz                                                                                                                                                                                                                                                                                                          |
| Motor Control Method                | PWM drive output with V/F control, includes programmable "catch-a-spinning motor" function                                                                                                                                                                                                                            |
| PWM Switch Frequency                | 0.75 to 15kHz (2 to 25Hp for 208/230V and 2 to 30Hp for 460V)<br>0.75 to 10kHz (30 to 60Hp for 208/230V and 40 to 100Hp for 460V)<br>0.75 to 6kHz (125 to 200Hp for 460V)                                                                                                                                             |
| Drive Overload Capacity             | 120% rated current for 1 min.                                                                                                                                                                                                                                                                                         |
| Motor Overload                      | Programmable (electronic)                                                                                                                                                                                                                                                                                             |
| Torque Boost                        | Programmable to provide additional starting torque if required                                                                                                                                                                                                                                                        |
| Speed Reference                     | 0 to +10VDC, 4 to 20mA, or Keypad (programmable inverse operation for analog signals)                                                                                                                                                                                                                                 |
| Speed Reference Resolution          | Analog setting: 1/1000 of maximum frequency<br>Keypad setting: 0.01Hz (99.99Hz or less)                                                                                                                                                                                                                               |
| Acceleration/Deceleration Time      | 0 to 3600 seconds, with four user selectable patterns                                                                                                                                                                                                                                                                 |
| Jump Frequencies                    | Qty 3 programmable frequency set points with adjustable jump bandwidth of 0 to 30Hz                                                                                                                                                                                                                                   |
| Output Signals                      | Qty 1: N.O. dry contacts rated 0.3A @ 230V max, functionality: Drive Run<br>Qty 1: Form C dry contacts rated 0.3A @ 230V max, functionality: Drive Fault<br>Qty 1: N.O. dry contacts rated 5A @ 230V max, functionality: Damper Control<br>Qty 1: 0 to 10VDC or 4 to 20mA, user selectable programmable analog signal |

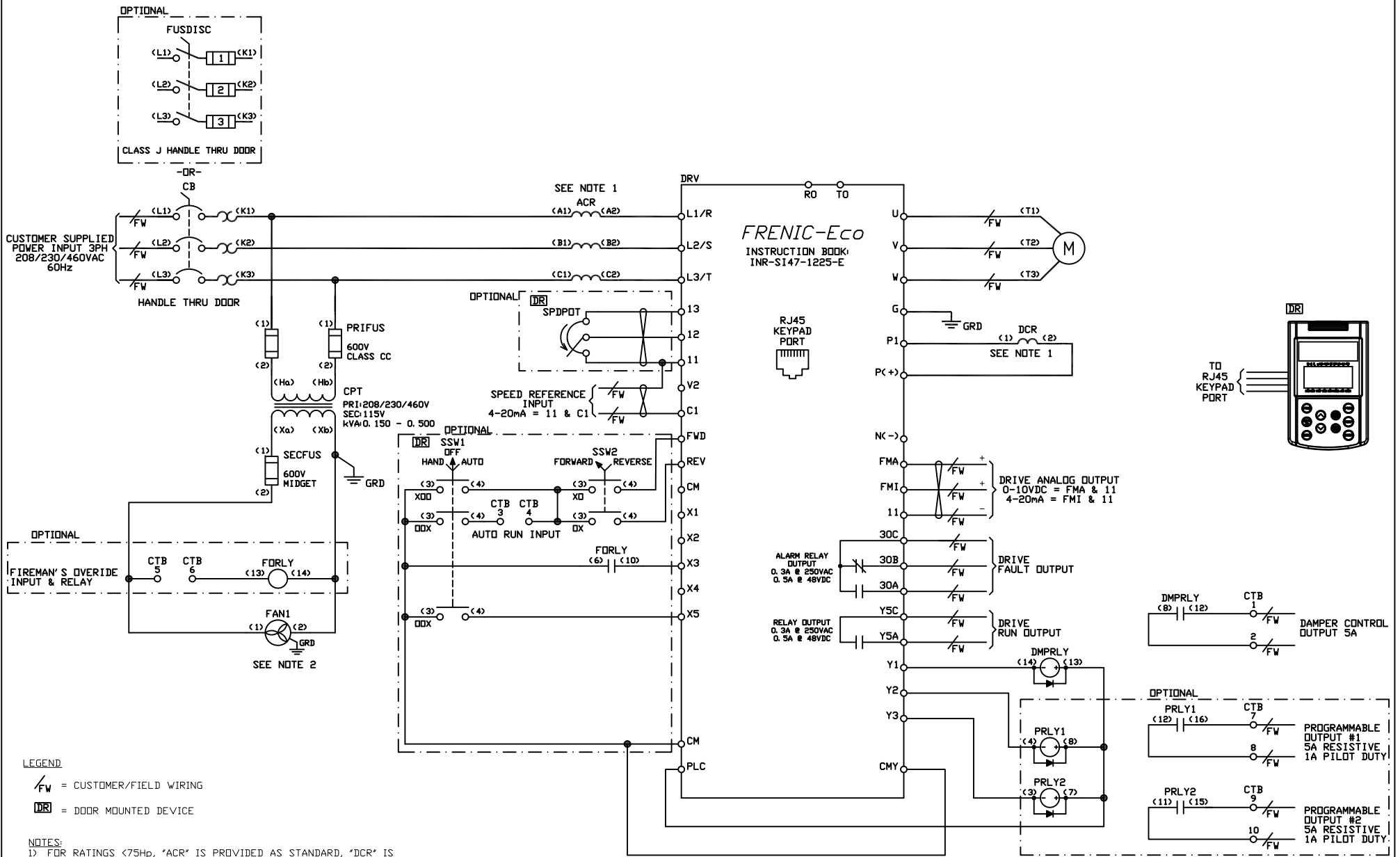
**Drawing Number Selection Matrix**  
*UL/NEMA Type 3R Non-Bypass*

**208/230V**

| HP  | Current (A) | Electrical Drawing | Outline Drawing |
|-----|-------------|--------------------|-----------------|
| 2   | 7.5         | ROA700061          | ROA300932       |
| 3   | 10.6        | ROA700061          | ROA300932       |
| 5   | 16.7        | ROA700061          | ROA300932       |
| 7.5 | 24.2        | ROA700061          | ROA300932       |
| 10  | 30.8        | ROA700061          | ROA300932       |
| 15  | 46.2        | ROA700061          | ROA300932       |
| 20  | 59.4        | ROA700061          | ROA300933       |
| 25  | 74.8        | ROA700061          | ROA300933       |
| 30  | 88          | ROA700061          | ROA300933       |

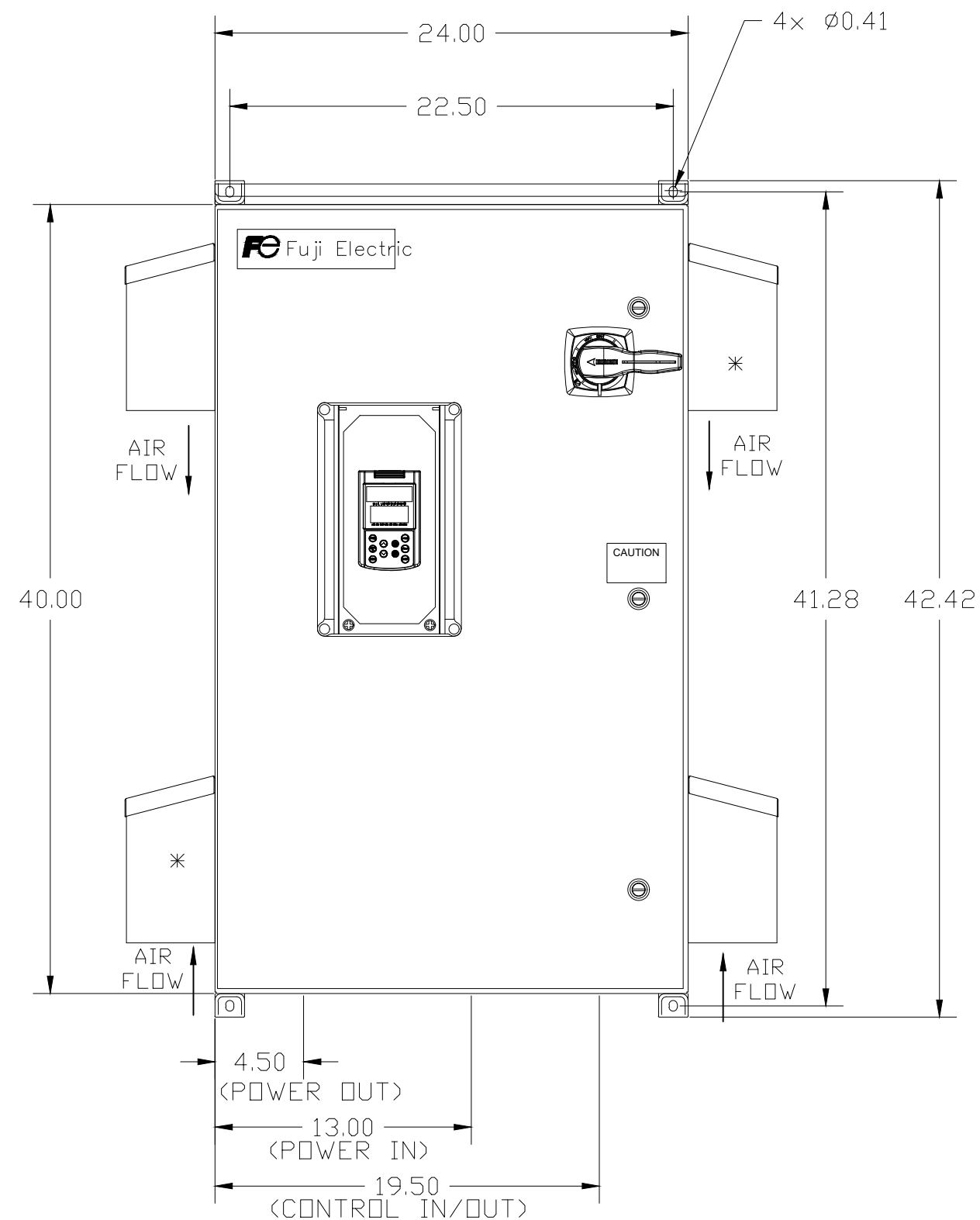
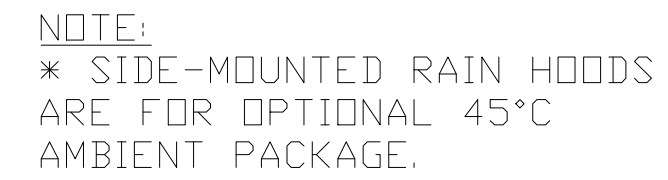
**460V**

| HP  | Current (A) | Electrical Drawing | Outline Drawing |
|-----|-------------|--------------------|-----------------|
| 2   | 3.4         | ROA700061          | ROA300932       |
| 3   | 4.8         | ROA700061          | ROA300932       |
| 5   | 7.6         | ROA700061          | ROA300932       |
| 7.5 | 11          | ROA700061          | ROA300932       |
| 10  | 14          | ROA700061          | ROA300932       |
| 15  | 21          | ROA700061          | ROA300932       |
| 20  | 27          | ROA700061          | ROA300933       |
| 25  | 34          | ROA700061          | ROA300933       |
| 30  | 40          | ROA700061          | ROA300933       |
| 40  | 52          | ROA700061          | ROA300933       |
| 50  | 65          | ROA700061          | ROA300934       |
| 60  | 77          | ROA700061          | ROA300934       |
| 75  | 96          | ROA700061          | ROA300934       |



## FRENIC-EcoPAK, UL/NEMA Type 3R Non-Bypass - Electrical Data

| Hp<br>Rating          | Rated<br>Output<br>Current | Rated<br>Input<br>Current | Circuit<br>Breaker (CB)<br>Amp Rating | Circuit<br>Breaker (CB)<br>AIC Rating | Complete<br>Assembly AIC<br>Rating w/ CB | Fusible<br>Disconnect<br>Amp Rating | Input Fuses<br>Amp Rating | Fusible Disc.<br>w/ Fuses<br>AIC Rating | Complete<br>Assembly AIC<br>Rating w/<br>Fusible Disc. | DC Reactor                 |                                                        | Low Z AC Line Reactor |                                 | High Z AC Line Reactor |                                 |
|-----------------------|----------------------------|---------------------------|---------------------------------------|---------------------------------------|------------------------------------------|-------------------------------------|---------------------------|-----------------------------------------|--------------------------------------------------------|----------------------------|--------------------------------------------------------|-----------------------|---------------------------------|------------------------|---------------------------------|
|                       |                            |                           |                                       |                                       |                                          |                                     |                           |                                         |                                                        | Part Number                | Ratings<br>Amps /<br>Inductance                        | Part Number           | Ratings<br>Amps /<br>Inductance | Part Number            | Ratings<br>Amps /<br>Inductance |
| 208/230VAC, 60Hz, 3PH |                            |                           |                                       |                                       |                                          |                                     |                           |                                         |                                                        |                            |                                                        |                       |                                 |                        |                                 |
| 2                     | 7.5                        | 9.5                       |                                       |                                       |                                          | 30                                  | 10                        | 200k                                    | 100k                                                   | See High Z AC Line Reactor | High Z Line Reactor Included<br>as Standard on 208 VAC |                       | LR3 24-6/10                     | 10A/2.2mH              |                                 |
| 3                     | 10.6                       | 12.6                      |                                       |                                       |                                          | 30                                  | 15                        | 200k                                    | 100k                                                   | See High Z AC Line Reactor |                                                        |                       | LR3 24-6/16                     | 16A/1.38mH             |                                 |
| 5                     | 16.7                       | 18.7                      |                                       |                                       |                                          | 30                                  | 25                        | 200k                                    | 100k                                                   | See High Z AC Line Reactor |                                                        |                       | LR3 24-6/20                     | 20A/1.1mH              |                                 |
| 7.5                   | 24.2                       | 27                        |                                       |                                       |                                          | 30                                  | 30                        | 200k                                    | 100k                                                   | See High Z AC Line Reactor |                                                        |                       | LR3 24-6/30                     | 30A/.74mH              |                                 |
| 10                    | 30.8                       | 33                        | 40                                    | 22k                                   | 22k                                      | 60                                  | 45                        | 200k                                    | 100k                                                   | See High Z AC Line Reactor |                                                        |                       | LR3 24-6/35                     | 35A/.63mH              |                                 |
| 15                    | 46.2                       | 49                        | 70                                    | 22k                                   | 22k                                      | 60                                  | 60                        | 200k                                    | 100k                                                   | See High Z AC Line Reactor |                                                        |                       | LR3 24-6/50                     | 50A/.44mH              |                                 |
| 20                    | 59.4                       | 62                        | 90                                    | 22k                                   | 22k                                      | 100                                 | 80                        | 200k                                    | 100k                                                   | See High Z AC Line Reactor |                                                        |                       | LR3 24-6/63                     | 63A/.350mH             |                                 |
| 25                    | 74.8                       | 78                        | 100                                   | 22k                                   | 22k                                      | 100                                 | 100                       | 200k                                    | 100k                                                   | See High Z AC Line Reactor |                                                        |                       | LR3 24-6/80                     | 80A/.270mH             |                                 |
| 30                    | 88                         | 91                        | 125                                   | 35k                                   | 35k                                      | 200                                 | 125                       | 100k                                    | 100k                                                   | See High Z AC Line Reactor |                                                        |                       | LR3 24-6/90                     | 90A/.245mH             |                                 |
| 460VAC, 60Hz, 3PH     |                            |                           |                                       |                                       |                                          |                                     |                           |                                         |                                                        |                            |                                                        |                       |                                 |                        |                                 |
| 2                     | 3.4                        | 4.7                       |                                       |                                       |                                          | 30                                  | 6                         | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/6            | 6A/3.700mH                      | LR3 48-5/6             | 6A/6.200mH                      |
| 3                     | 4.8                        | 6                         |                                       |                                       |                                          | 30                                  | 8                         | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/8            | 8A/2.750mH                      | LR3 48-5/8             | 8A/4.600mH                      |
| 5                     | 7.6                        | 9.5                       |                                       |                                       |                                          | 30                                  | 12                        | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/10           | 10A/2.200mH                     | LR3 48-5/10            | 10A/3.680mH                     |
| 7.5                   | 11                         | 12                        |                                       |                                       |                                          | 30                                  | 15                        | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/16           | 16A/1.380mH                     | LR3 48-5/16            | 16A/2.300mH                     |
| 10                    | 14                         | 15                        |                                       |                                       |                                          | 30                                  | 25                        | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/16           | 16A/1.380mH                     | LR3 48-5/16            | 16A/2.300mH                     |
| 15                    | 21                         | 22                        |                                       |                                       |                                          | 30                                  | 30                        | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/25           | 25A/.880mH                      | LR3 48-5/25            | 25A/1.470mH                     |
| 20                    | 27                         | 29                        | 40                                    | 22k                                   | 22k                                      | 60                                  | 40                        | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/30           | 30A/.740mH                      | LR3 48-5/30            | 30A/1.23mH                      |
| 25                    | 34                         | 35                        | 50                                    | 22k                                   | 22k                                      | 60                                  | 50                        | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/35           | 35A/.630mH                      | LR3 48-5/35            | 35A/1.05mH                      |
| 30                    | 40                         | 41                        | 60                                    | 22k                                   | 22k                                      | 60                                  | 60                        | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/45           | 45A/.490mH                      | LR3 48-5/45            | 45A/.817mH                      |
| 40                    | 52                         | 53                        | 70                                    | 22k                                   | 22k                                      | 100                                 | 70                        | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/50           | 50A/.440mH                      | LR3 48-5/50            | 50A/.735mH                      |
| 50                    | 65                         | 68                        | 90                                    | 22k                                   | 22k                                      | 100                                 | 90                        | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/70           | 70A/.315mH                      | LR3 48-5/70            | 70A/.525mH                      |
| 60                    | 77                         | 79                        | 100                                   | 22k                                   | 22k                                      | 100                                 | 100                       | 200k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/80           | 80A/.27mH                       | LR3 48-5/80            | 80A/.46mH                       |
| 75                    | 96                         | 97                        | 150                                   | 35k                                   | 35k                                      | 200                                 | 150                       | 100k                                    | 100k                                                   | See Low Z AC Line Reactor  |                                                        | LR3 48-3/100          | 100A/.22mH                      | LR3 48-5/100           | 100A/.368mH                     |

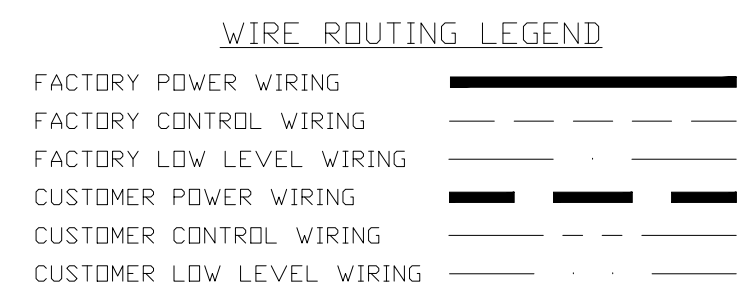


TYPICAL DISTANCE FROM  
BACK OF ENCLOSURE FOR  
ALL CONDUIT LOCATIONS

MAX EST. WATTS LOSS: 847W  
MAX EST. WEIGHT: 213lbs  
DIMENSIONS ARE IN INCHES

SH. 1





DRV

FRENIC-Eco

FDISC



FDISC

The diagram shows a 3U FDISC drive assembly. It consists of three vertical drive units, each with a square window and a circular indicator. A central vertical component, likely a motor or actuator, is positioned between the units. The entire assembly is labeled 'FDISC' at the top.

DCR

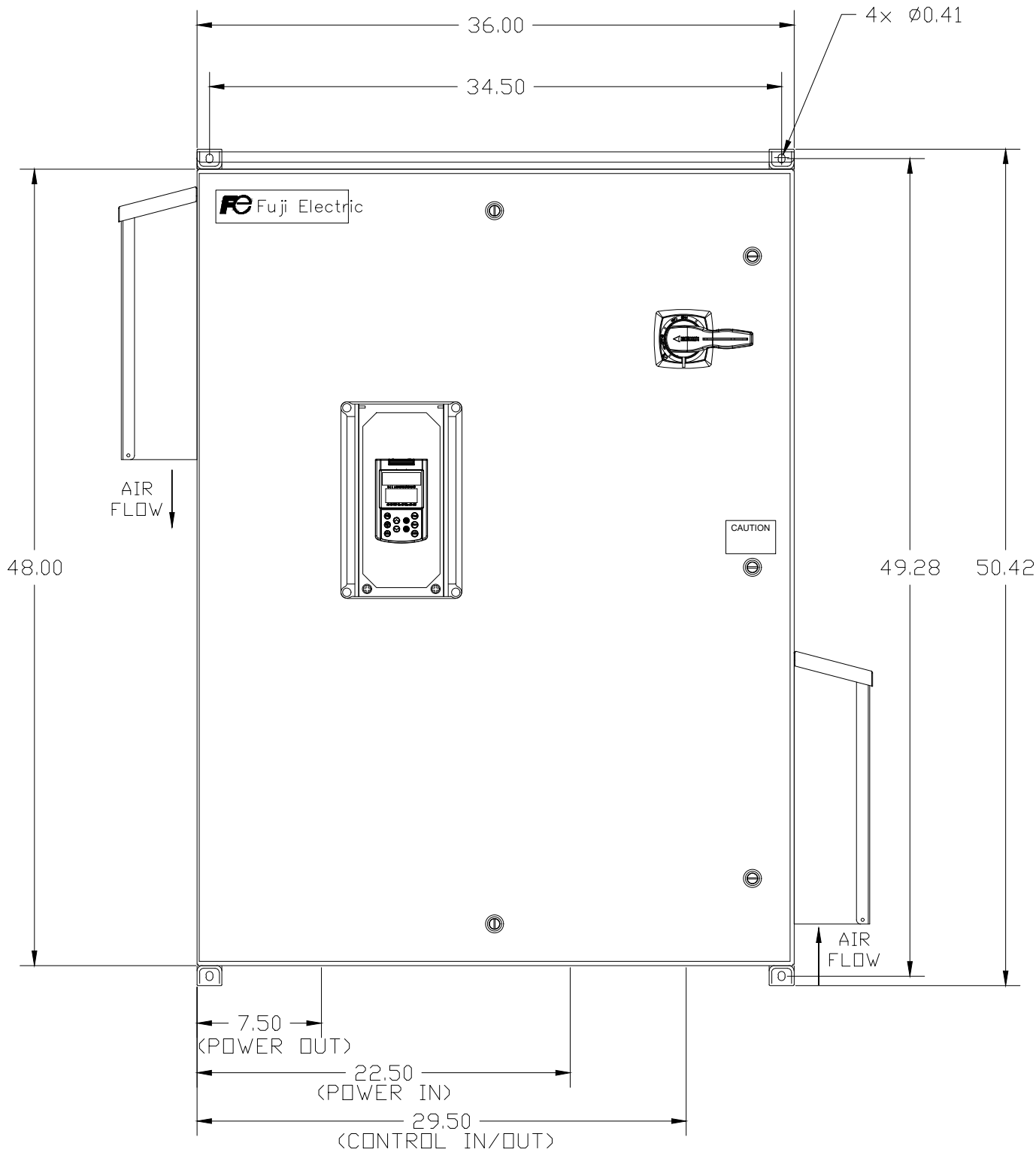
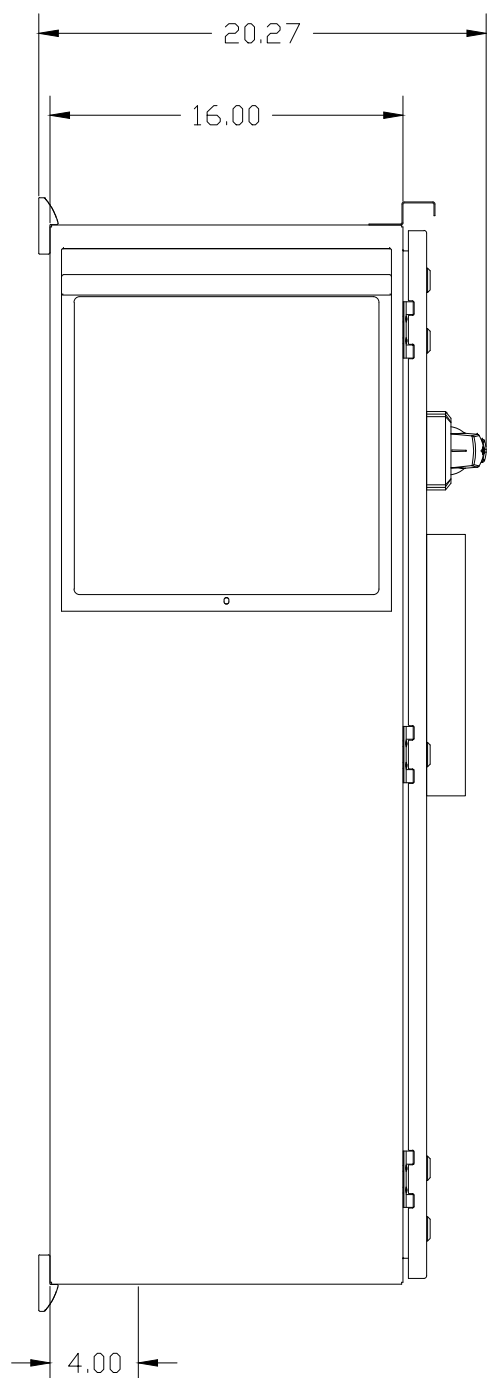
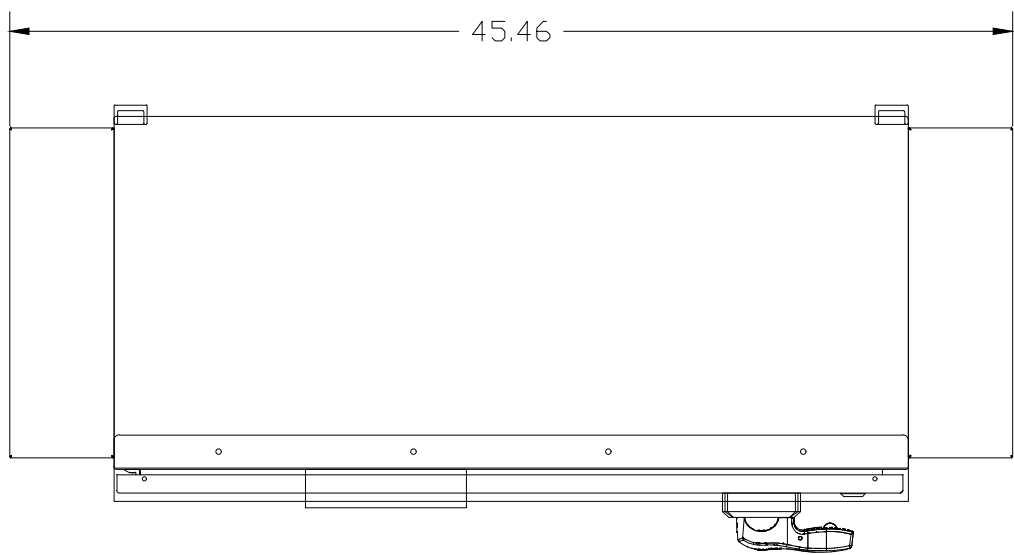
OPTIONAL INPUT  
DISCONNECT DEVICE FOR:  
15Hp @ 208/230V  
MUTUALLY EXCLUSIVE  
WITH "CB"

**FC**

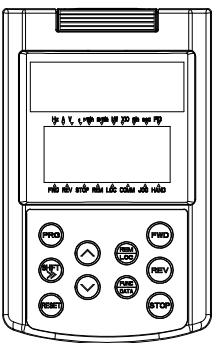
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|--------------------------------|-------------|-----------|----------|-------|
| ENGINEERING                    |             | NAME      | DATE     | TITLE |
|                                | DRAWN       | R. MONTES | 02/21/20 |       |
|                                | REVIEWED BY | T.WEEB    | 02/21/20 |       |
| Fuji Electric Corp. of America |             |           |          |       |

|          |           |       |
|----------|-----------|-------|
| DWG. NO. | R0A300932 |       |
| SH. NO.  | CONT. FL  | SH. 2 |





ENLARGED VIEW  
OF DOOR DEVICES



\* NOTE \*  
CONDUIT HUBS TO BE  
"LIQUID-TIGHT" TYPE TO  
MAINTAIN TYPE 3R  
ENCLOSURE INTEGRITY.

TYPICAL DISTANCE FROM  
BACK OF ENCLOSURE FOR  
ALL CONDUIT LOCATIONS

MAX EST. WATTS LOSS: 1392W  
MAX EST. WEIGHT: 332lbs  
DIMENSIONS ARE IN INCHES

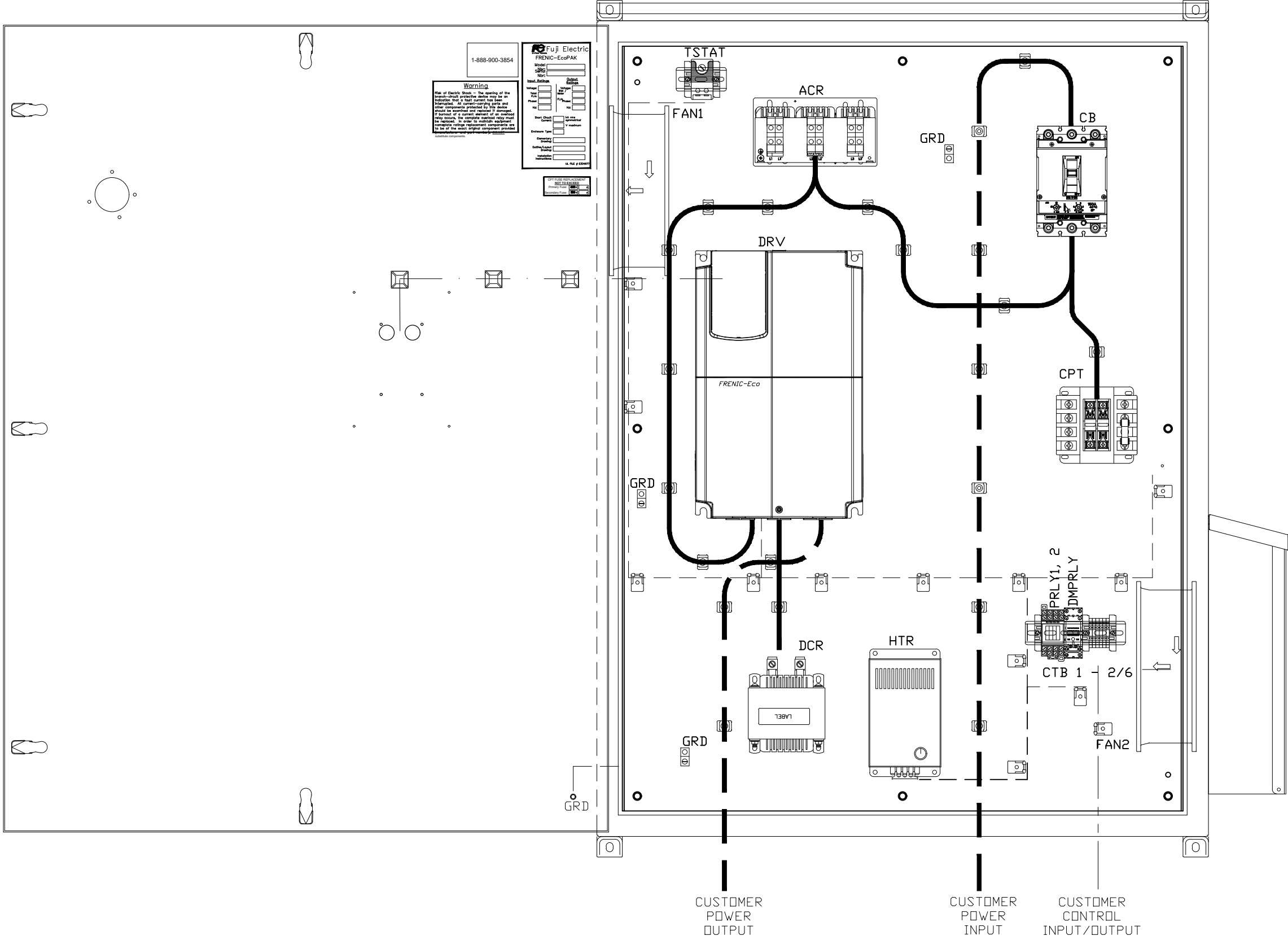


| REVISIONS | REV.   |               |
|-----------|--------|---------------|
|           | DATE   |               |
|           | BY     |               |
|           | STATUS | ISSUED-TO-MFG |

| ENGINEERING |                                | NAME      | DATE     |
|-------------|--------------------------------|-----------|----------|
|             | DRAWN                          | R. MONTES | 02/21/20 |
|             | REVIEWED BY                    | T. WEEB   | 02/21/20 |
|             | Fuji Electric Corp. of America |           |          |

| TITLE | OUTLINE & COMPONENT LAYOUT DRAWING FOR: |  |  |
|-------|-----------------------------------------|--|--|
|       | FRENIC-EcoPAK, NON-BYPASS NEMA 3R       |  |  |
|       | 20-25Hp @ 208/230V                      |  |  |
|       | 25-40Hp @ 460V<br>PANEL OUTLINE         |  |  |

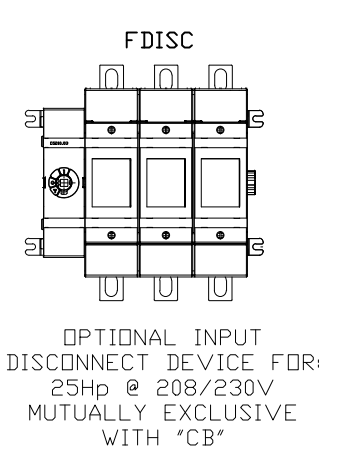
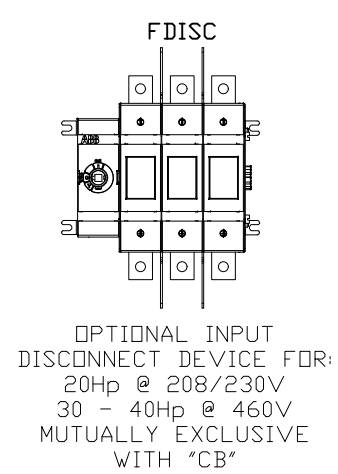
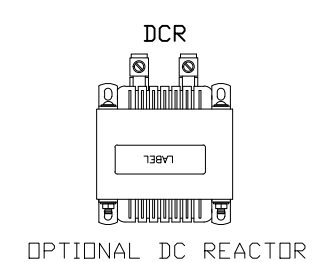
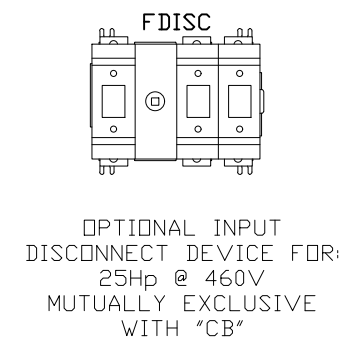
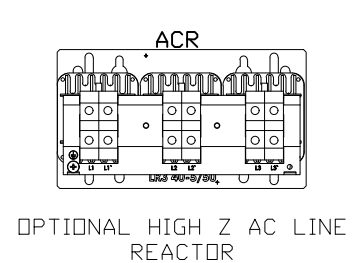
| SH. NO. | DWG NO.   |  |
|---------|-----------|--|
|         | R0A300933 |  |
| CONT. 2 | SH. 1     |  |



WIRE ROUTING LEGEND

|                           |           |
|---------------------------|-----------|
| FACTORY POWER WIRING      | —————     |
| FACTORY CONTROL WIRING    | - - - - - |
| FACTORY LOW LEVEL WIRING  | · · · · · |
| CUSTOMER POWER WIRING     | —————     |
| CUSTOMER CONTROL WIRING   | - - - - - |
| CUSTOMER LOW LEVEL WIRING | · · · · · |

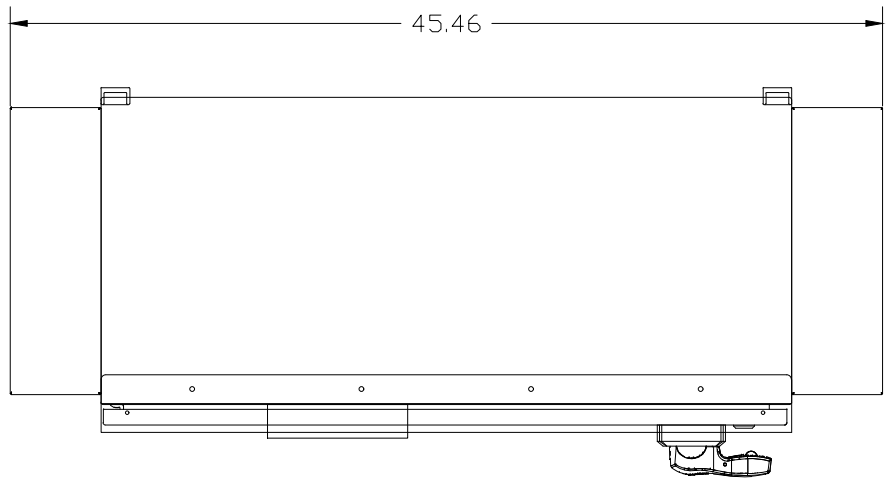
OPTIONAL OR REPLACEMENT COMPONENT CONFIGURATIONS AND NOTES:



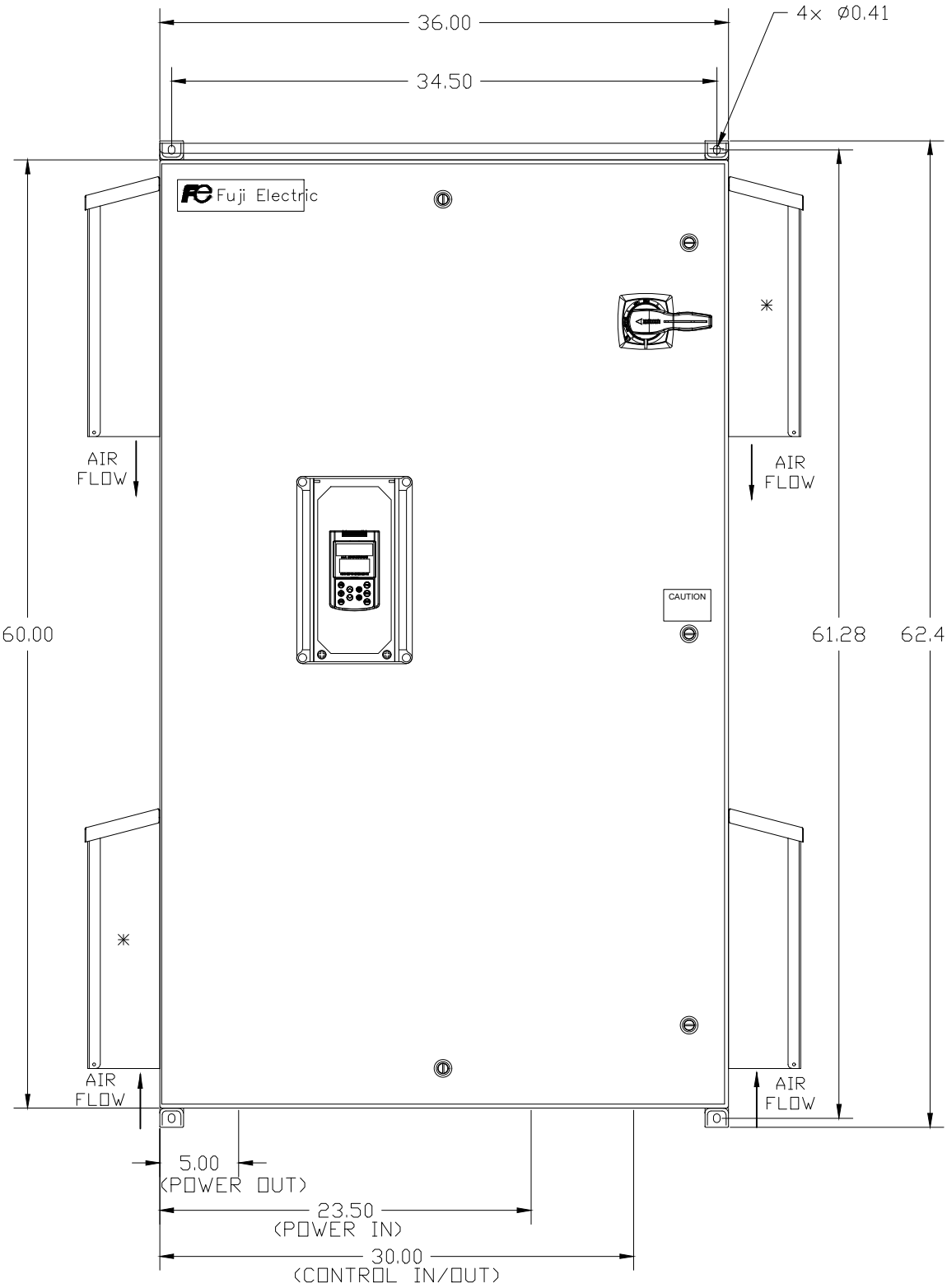
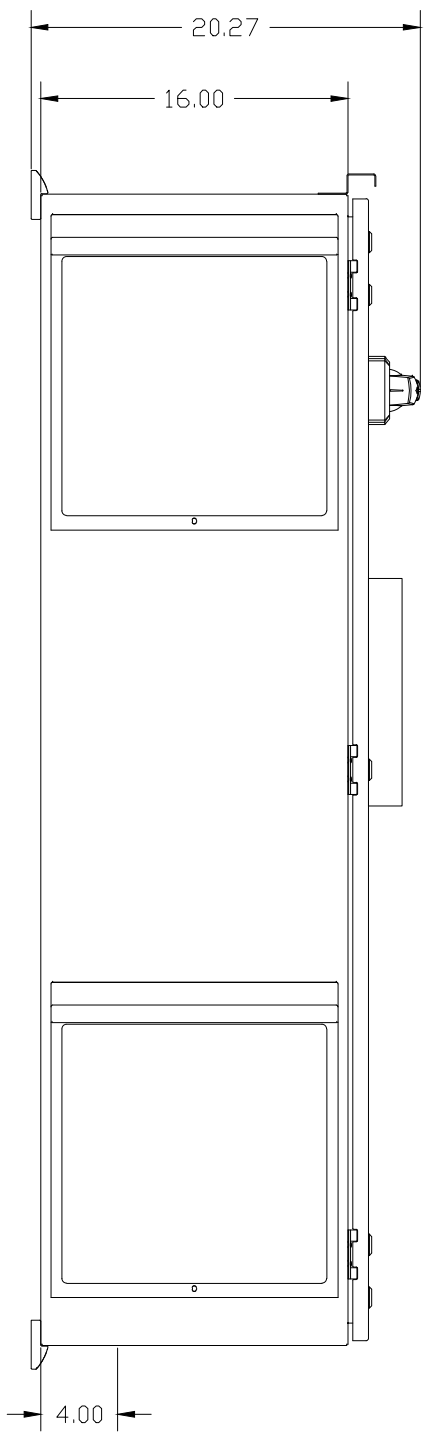
NOTES:

1) COMPONENT LAYOUT DEPICTS MOST COMMON POWER COMPONENT CONFIGURATION WITH ALL AVAILABLE CONTROL OPTIONS, SEE OPTIONAL OR REPLACEMENT COMPONENT CONFIGURATIONS AND NOTES FOR DEVIATIONS FROM COMPONENTS SHOWN.

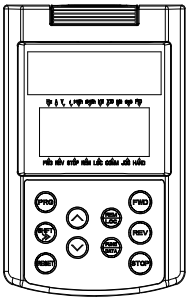
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|-------------------------------------------------------------------------------------|-----------|--------|-------------|---------------|-------------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------|----------|-----------|--|-------------|-----------|----------|
|  | REVISIONS |        | ENGINEERING |               | Fuj Electric Corp. of America | TITLE | OUTLINE & COMPONENT LAYOUT DRAWING FOR:<br>FRENIC-EcoPAK, NON-BYPASS NEMA 3R<br>20-25Hp @ 208/230V<br>25-40Hp @ 460V<br>PANEL LAYOUT | DWG. NO. | R0A300933 |  |             |           |          |
|                                                                                     |           | REV.   |             |               |                               |       |                                                                                                                                      |          |           |  | NAME        | DATE      |          |
|                                                                                     |           | DATE   |             |               |                               |       |                                                                                                                                      |          |           |  | DRAWN       | R. MONTES | 02/21/20 |
|                                                                                     |           | BY     |             |               |                               |       |                                                                                                                                      |          |           |  | REVIEWED BY | T. WEEB   | 02/21/20 |
|                                                                                     |           | STATUS |             | ISSUED-TO-MFG |                               |       |                                                                                                                                      |          |           |  |             |           |          |
|                                                                                     |           |        |             |               |                               |       |                                                                                                                                      |          |           |  |             |           |          |



NOTE:  
\* SIDE-MOUNTED RAIN HOODS  
ARE FOR OPTIONAL 45°C  
AMBIENT PACKAGE.



ENLARGED VIEW  
OF DOOR DEVICES



\* NOTE \*  
CONDUIT HUBS TO BE  
"LIQUID-TIGHT" TYPE TO  
MAINTAIN TYPE 3R  
ENCLOSURE INTEGRITY.

TYPICAL DISTANCE FROM  
BACK OF ENCLOSURE FOR  
ALL CONDUIT LOCATIONS

MAX EST. WATTS LOSS: 2090W  
MAX EST. WEIGHT: 498lbs  
DIMENSIONS ARE IN INCHES



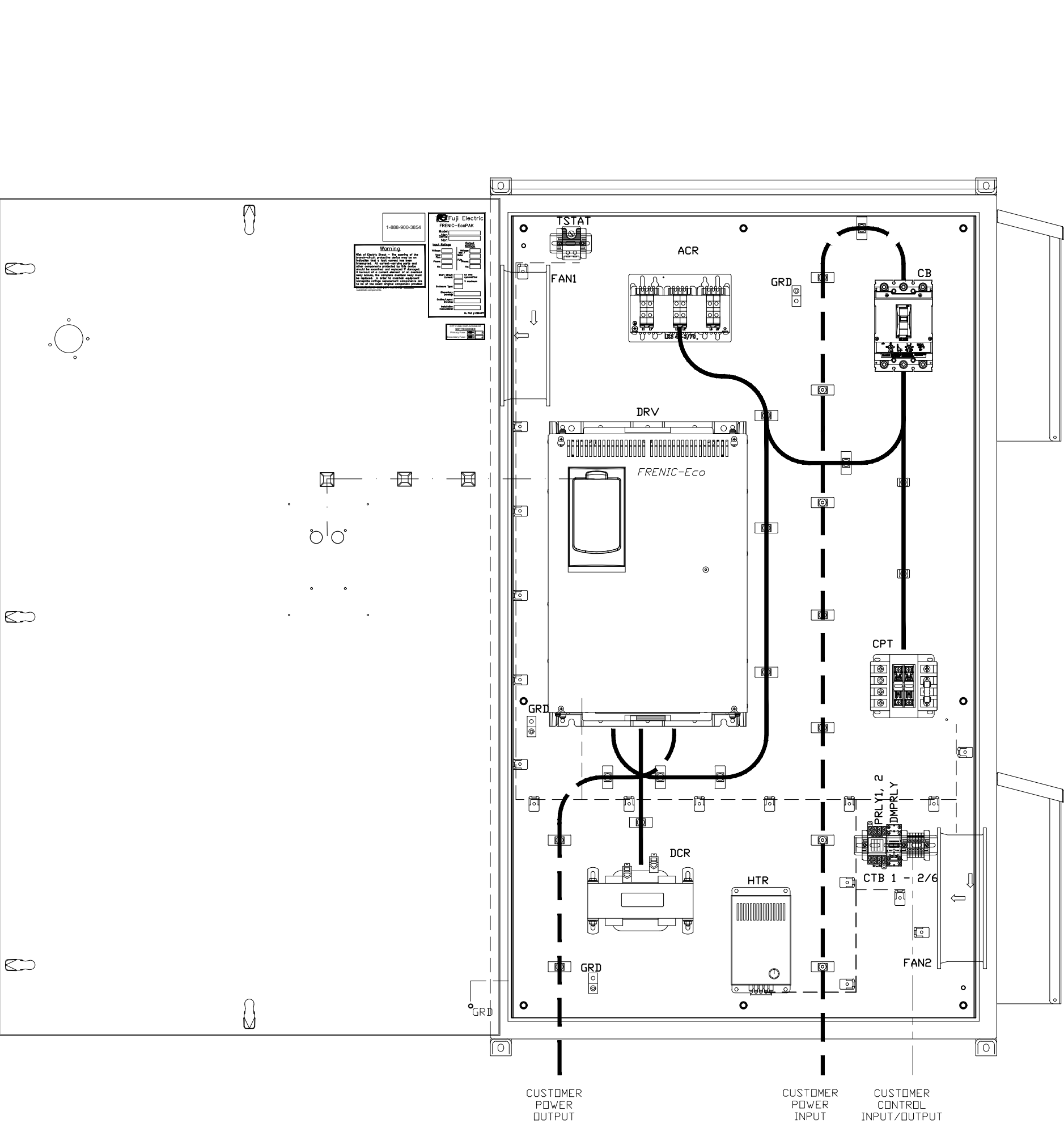
| REVISIONS | REV.   |               |
|-----------|--------|---------------|
|           | DATE   |               |
|           | BY     |               |
|           | STATUS | ISSUED-TO-MFG |

| ENGINEERING | NAME                           | DATE     |
|-------------|--------------------------------|----------|
|             | DRAWN R. MONTES                | 02/21/20 |
|             | REVIEWED BY T. WEEB            | 02/21/20 |
|             | Fuji Electric Corp. of America |          |

| TITLE | OUTLINE & COMPONENT LAYOUT DRAWING FOR: |  |
|-------|-----------------------------------------|--|
|       | FRENIC-EcoPAK, NON-BYPASS NEMA 3R       |  |
|       | 30Hp @ 208/230V                         |  |
|       | 50-75Hp @ 460V<br>PANEL OUTLINE         |  |

| DWG NO. | R0A300934 |       |
|---------|-----------|-------|
| SH. NO. | CONT. 2   | SH. 1 |





| WIRE ROUTING LEGEND       |           |
|---------------------------|-----------|
| FACTORY POWER WIRING      | —————     |
| FACTORY CONTROL WIRING    | - - - - - |
| FACTORY LOW LEVEL WIRING  | · · · · · |
| CUSTOMER POWER WIRING     | —————     |
| CUSTOMER CONTROL WIRING   | - - - - - |
| CUSTOMER LOW LEVEL WIRING | · · · · · |

OPTIONAL OR REPLACEMENT COMPONENT CONFIGURATIONS AND NOTES

DRV

DRIVE FRAME SIZE FOR:  
30Hp @ 208/230V

DRV

DRIVE FRAME SIZE FOR:  
50-60Hp @ 460V

DCR

OPTIONAL DC REACTOR

FDISC

OPTIONAL INPUT DISCONNECT DEVICE FOR:  
50Hp @ 460V  
MUTUALLY EXCLUSIVE WITH 'CB'

ACR

OPTIONAL HIGH Z AC LINE REACTOR

FDISC

OPTIONAL INPUT DISCONNECT DEVICE FOR:  
30Hp @ 208/230V  
50-75Hp @ 460V  
MUTUALLY EXCLUSIVE WITH 'CB'

NOTES:  
1) COMPONENT LAYOUT DEPICTS MOST COMMON POWER COMPONENT CONFIGURATION WITH ALL AVAILABLE CONTROL OPTIONS, SEE OPTIONAL OR REPLACEMENT COMPONENT CONFIGURATIONS AND NOTES FOR DEVIATIONS FROM COMPONENTS SHOWN.

|                                                                                     |           |        |               |             |                                |      |       |                                                                                                                                   |          |           |       |
|-------------------------------------------------------------------------------------|-----------|--------|---------------|-------------|--------------------------------|------|-------|-----------------------------------------------------------------------------------------------------------------------------------|----------|-----------|-------|
|  | REVISIONS | REV.   |               | ENGINEERING | NAME                           | DATE | TITLE | OUTLINE & COMPONENT LAYOUT DRAWING FOR:<br>FRENIC-EcoPAK, NON-BYPASS NEMA 3R<br>30Hp @ 208/230V<br>50-75Hp @ 460V<br>PANEL LAYOUT | DWG. NO. | R0A300934 |       |
|                                                                                     |           | DATE   |               |             |                                |      |       |                                                                                                                                   |          |           |       |
|                                                                                     |           | BY     |               |             |                                |      |       |                                                                                                                                   |          |           |       |
|                                                                                     |           | STATUS | ISSUED-TO-MFG |             |                                |      |       |                                                                                                                                   |          |           |       |
|                                                                                     |           |        |               |             |                                |      |       |                                                                                                                                   |          |           |       |
|                                                                                     |           |        |               |             | Fuji Electric Corp. of America |      |       |                                                                                                                                   | SH. NO.  | CONT. FL  | SH. 2 |

## FRENIC-EcoPAK, Non-Bypass - Mechanical Data

| Hp<br>Rating                                  | Overall Dimensions -<br>Height x Width x Depth<br>[inches] | Estimated<br>Max. Weight<br>[lbs] | Estimated<br>Max. Watts Loss |
|-----------------------------------------------|------------------------------------------------------------|-----------------------------------|------------------------------|
| <b>208/230VAC, 60Hz, 3PH, UL/NEMA Type 3R</b> |                                                            |                                   |                              |
| 2                                             | 42.95 x 24.15 x 17.99                                      | 189                               | 207                          |
| 3                                             | 42.95 x 24.15 x 17.99                                      | 189                               | 252                          |
| 5                                             | 42.95 x 24.15 x 17.99                                      | 194                               | 339                          |
| 7.5                                           | 48.95 x 30.78 x 19.99                                      | 240                               | 510                          |
| 10                                            | 48.95 x 30.78 x 19.99                                      | 246                               | 633                          |
| 15                                            | 48.95 x 30.78 x 19.99                                      | 251                               | 807                          |
| 20                                            | 57.01 x 42.73 x 21.91                                      | 322                               | 1100                         |
| 25                                            | 57.01 x 42.73 x 21.91                                      | 338                               | 1211                         |
| 30                                            | 69.00 x 42.63 x 21.91                                      | 389                               | 1439                         |
| <b>460VAC, 60Hz, 3PH, UL/NEMA Type 3R</b>     |                                                            |                                   |                              |
| 2                                             | 42.95 x 24.15 x 17.99                                      | 189                               | 178                          |
| 3                                             | 42.95 x 24.15 x 17.99                                      | 189                               | 236                          |
| 5                                             | 42.95 x 24.15 x 17.99                                      | 189                               | 375                          |
| 7.5                                           | 42.95 x 24.15 x 17.99                                      | 196                               | 403                          |
| 10                                            | 48.95 x 30.78 x 19.99                                      | 240                               | 609                          |
| 15                                            | 48.95 x 30.78 x 19.99                                      | 240                               | 727                          |
| 20                                            | 48.95 x 30.78 x 19.99                                      | 254                               | 887                          |
| 25                                            | 57.01 x 42.73 x 21.91                                      | 294                               | 1028                         |
| 30                                            | 57.01 x 42.73 x 21.91                                      | 295                               | 1160                         |
| 40                                            | 57.01 x 42.73 x 21.91                                      | 310                               | 1485                         |
| 50                                            | 69.00 x 42.63 x 21.91                                      | 407                               | 1763                         |
| 60                                            | 69.00 x 42.63 x 21.91                                      | 416                               | 2035                         |
| 75                                            | 69.00 x 42.63 x 21.91                                      | 465                               | 2109                         |