

## 3-8. ELECTRIC CHARACTERISTICS

### ■ SPACE SAVING COMBINATION

|      |            | Rated Value  |             | Electric Characteristics  |          |         |                          |                                |                                |                              |            |                   |         |
|------|------------|--------------|-------------|---------------------------|----------|---------|--------------------------|--------------------------------|--------------------------------|------------------------------|------------|-------------------|---------|
|      |            | Power Supply |             | Full Load Characteristics |          |         | Wiring Specifications *1 |                                |                                |                              | Compressor | Outdoor Fan Motor |         |
| HP   | Model name | Hz           | Voltage (V) | MCA (A)                   | TOCA (A) | MSC (A) | MFA (A)                  | Power Cable (mm <sup>2</sup> ) | Earth Cable (mm <sup>2</sup> ) | Limited Wiring Length (m) *2 | RLA (A)    | Output (kW)       | FLA (A) |
| 8HP  | AJ*A72LALH | 50           | 400         | 24.7                      | 25.2     | 19.2    | 30                       | 4                              | 4                              | 30                           | 10.2       | 0.7               | 3.2     |
| 10HP | AJ*A90LALH | 50           | 400         | 24.7                      | 25.2     | 19.2    | 30                       | 4                              | 4                              | 30                           | 10.2       | 0.7               | 3.2     |
| 12HP | AJ*108LALH | 50           | 400         | 38.0                      | 41.2     | 95.2    | 50                       | 10                             | 6                              | 42                           | 10.2+10.0  | 0.7               | 3.2     |
| 14HP | AJ*126LALH | 50           | 400         | 38.0                      | 41.2     | 95.2    | 50                       | 10                             | 6                              | 42                           | 10.2+10.0  | 0.7               | 3.2     |
| 16HP | AJ*144LALH | 50           | 400         | 38.0                      | 41.2     | 95.2    | 50                       | 10                             | 6                              | 42                           | 10.2+10.0  | 0.7               | 3.2     |

OUTDOOR UNITS

OUTDOOR UNITS

- Select the breaker based on MCA of the table above.
- Select the wire diameter based on the larger value of MCA or TOCA of the table above and select a wire diameter which withstands the breaker capacity.

\*1 Wiring Spec : These values are recommended data. Please select the wiring spec in accordance with local rules.

\*2 Limited Wiring Length : This wiring length is in case voltage drop less than 2%. When wiring length extend longer, select the wiring size of larger diameter.

RLA : Rated Load Amp of compressor under the standard condition.

MCA : Min Circuit Amp = Max Operating Current (Full Load)

MSC : Max Starting Current

TOCA : Total Value of Each Over Current Set

MFA : Main Fuse (Circuit Breaker) Current

|      |                |  | Rated Value  |             | Electric Characteristics  |          |         |
|------|----------------|--|--------------|-------------|---------------------------|----------|---------|
|      |                |  | Power Supply |             | Full Load Characteristics |          |         |
| HP   | Set model name | Model name                             | Hz           | Voltage (V) | MCA (A)                   | TOCA (A) | MSC (A) |
| 18HP | AJ*162LALH     | AJ*A90LALH<br>AJ*A72LALH               | 50           | 400         | 49.4                      | 50.4     | 38.4    |
| 20HP | AJ*180LALH     | AJ*108LALH<br>AJ*A72LALH               | 50           | 400         | 62.7                      | 66.4     | 114.4   |
| 22HP | AJ*198LALH     | AJ*108LALH<br>AJ*A90LALH               | 50           | 400         | 62.7                      | 66.4     | 114.4   |
| 24HP | AJ*216LALH     | AJ*108LALH<br>AJ*108LALH               | 50           | 400         | 76.0                      | 82.4     | 190.4   |
| 26HP | AJ*234LALH     | AJ*126LALH<br>AJ*108LALH               | 50           | 400         | 76.0                      | 82.4     | 190.4   |
| 28HP | AJ*252LALH     | AJ*144LALH<br>AJ*108LALH               | 50           | 400         | 76.0                      | 82.4     | 190.4   |
| 30HP | AJ*270LALH     | AJ*144LALH<br>AJ*126LALH               | 50           | 400         | 76.0                      | 82.4     | 190.4   |
| 32HP | AJ*288LALH     | AJ*144LALH<br>AJ*144LALH               | 50           | 400         | 76.0                      | 82.4     | 190.4   |
| 34HP | AJ*306LALH     | AJ*108LALH<br>AJ*108LALH<br>AJ*A90LALH | 50           | 400         | 100.7                     | 107.6    | 209.6   |
| 36HP | AJ*324LALH     | AJ*108LALH<br>AJ*108LALH<br>AJ*108LALH | 50           | 400         | 114.0                     | 123.6    | 285.6   |
| 38HP | AJ*342LALH     | AJ*126LALH<br>AJ*108LALH<br>AJ*108LALH | 50           | 400         | 114.0                     | 123.6    | 285.6   |
| 40HP | AJ*360LALH     | AJ*144LALH<br>AJ*108LALH<br>AJ*108LALH | 50           | 400         | 114.0                     | 123.6    | 285.6   |
| 42HP | AJ*378LALH     | AJ*144LALH<br>AJ*126LALH<br>AJ*108LALH | 50           | 400         | 114.0                     | 123.6    | 285.6   |
| 44HP | AJ*396LALH     | AJ*144LALH<br>AJ*144LALH<br>AJ*108LALH | 50           | 400         | 114.0                     | 123.6    | 285.6   |
| 46HP | AJ*414LALH     | AJ*144LALH<br>AJ*144LALH<br>AJ*126LALH | 50           | 400         | 114.0                     | 123.6    | 285.6   |
| 48HP | AJ*432LALH     | AJ*144LALH<br>AJ*144LALH<br>AJ*144LALH | 50           | 400         | 114.0                     | 123.6    | 285.6   |

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TOCA : Total Value of Each Over Current Set

MFA : Main Fuse (Circuit Breaker) Current

## ENERGY EFFICIENCY COMBINATION

| HP   | Set model name | Model name                             | Rated Value  |             | Electric Characteristics  |          |         |
|------|----------------|--|--------------|-------------|---------------------------|----------|---------|
|      |                |  | Power Supply |             | Full Load Characteristics |          |         |
|      |                |  | Hz           | Voltage (V) | MCA (A)                   | TOCA (A) | MSC (A) |
| 16HP | AJ*144LALHH    | AJ*A72LALH<br>AJ*A72LALH               | 50           | 400         | 49.4                      | 50.4     | 38.4    |
| 22HP | AJ*198LALHH    | AJ*126LALH<br>AJ*A72LALH               | 50           | 400         | 62.7                      | 66.4     | 114.4   |
| 24HP | AJ*216LALHH    | AJ*A72LALH<br>AJ*A72LALH<br>AJ*A72LALH | 50           | 400         | 74.1                      | 75.6     | 57.6    |
| 26HP | AJ*234LALHH    | AJ*A90LALH<br>AJ*A72LALH<br>AJ*A72LALH | 50           | 400         | 74.1                      | 75.6     | 57.6    |
| 28HP | AJ*252LALHH    | AJ*108LALH<br>AJ*A72LALH<br>AJ*A72LALH | 50           | 400         | 87.4                      | 91.6     | 133.6   |
| 30HP | AJ*270LALHH    | AJ*126LALH<br>AJ*A72LALH<br>AJ*A72LALH | 50           | 400         | 87.4                      | 91.6     | 133.6   |
| 32HP | AJ*288LALHH    | AJ*108LALH<br>AJ*108LALH<br>AJ*A72LALH | 50           | 400         | 100.7                     | 107.6    | 209.6   |
| 34HP | AJ*306LALHH    | AJ*126LALH<br>AJ*108LALH<br>AJ*A72LALH | 50           | 400         | 100.7                     | 107.6    | 209.6   |
| 36HP | AJ*324LALHH    | AJ*126LALH<br>AJ*126LALH<br>AJ*A72LALH | 50           | 400         | 100.7                     | 107.6    | 209.6   |
| 40HP | AJ*360LALHH    | AJ*126LALH<br>AJ*126LALH<br>AJ*108LALH | 50           | 400         | 114.0                     | 123.6    | 285.6   |
| 42HP | AJ*378LALHH    | AJ*126LALH<br>AJ*126LALH<br>AJ*126LALH | 50           | 400         | 114.0                     | 123.6    | 285.6   |
| 44HP | AJ*396LALHH    | AJ*144LALH<br>AJ*126LALH<br>AJ*126LALH | 50           | 400         | 114.0                     | 123.6    | 285.6   |

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### 3-9. SAFETY DEVICES

| Safety device            |            | AJ*A72LALH   | AJ*A90LALH  | AJ*108LALH | AJ*126LALH | AJ*144LALH |
|--------------------------|------------|--|---|------------|------------|------------|
| Fuse (Main PCB)          |            | AC 250V 3.15A<br>AC 500V 15A   |   |            |            |            |
| Protector (INV PCB)      |            | AC 500V 25A  |   |            |            |            |
| Compressor Protector     | INV COMP   | Overcurrent protection -<br>Temperature protection Off : 110°C On : 80°C |   |            |            |            |
|                          | CONST COMP | —  | Temperature protection<br>Off:155°C±5(0A) On:80°C±11(0A)<br>Minimum operation current<br>On:14.4A(120°C) Off:20.0A(120°C)<br>Over current protection<br>3 - 10sec 59.0A |            |            |            |
| High Pressure Protection |            | Off : 4.2MPa On : 3.2MPa   |   |            |            |            |
| Low Pressure Protection  |            | Off : 0.05MPa  |   |            |            |            |

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