

# ABB BALDOR RELIANCE III

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## Customer information packet

### ECP4117T

30HP, 1180RPM, 3PH, 60HZ, 326T, 1264M, TEFC, F1

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

|                                       |                                                                |
|---------------------------------------|----------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                           |
| <b>Frame</b>                          | 326T                                                           |
| <b>Frame Material</b>                 | Iron                                                           |
| <b>Frequency</b>                      | 60.00 Hz                                                       |
| <b>Haz Area Class and Group</b>       | CLI GP A,B,C,D                                                 |
| <b>Haz Area Division</b>              | Division II                                                    |
| <b>Motor Letter Type</b>              | Three Phase                                                    |
| <b>Output @ Frequency</b>             | 30.000 HP @ 60 HZ                                              |
| <b>Phase</b>                          | 3                                                              |
| <b>Synchronous Speed @ Frequency</b>  | 1200 RPM @ 60 HZ                                               |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                             |
| <b>Agency Approvals</b>               | CCSA US<br>CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR       |
| <b>Ambient Temperature</b>            | 40 °C                                                          |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                               |
| <b>Auxiliary Box Lead Termination</b> | None                                                           |
| <b>Base Indicator</b>                 | Rigid                                                          |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                        |
| <b>Blower</b>                         | None                                                           |
| <b>Constant Torque Speed Range</b>    | 1                                                              |
| <b>Current @ Voltage</b>              | 82.000 A @ 208.0 V<br>78.000 A @ 230.0 V<br>39.000 A @ 460.0 V |
| <b>Design Code</b>                    | A                                                              |
| <b>Drip Cover</b>                     | No Drip Cover                                                  |
| <b>Duty Rating</b>                    | CONT                                                           |
| <b>Efficiency @ 100% Load</b>         | 93.0 %                                                         |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                      |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | V          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 12F904     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 12WGY812   |
| <b>Layout</b>       | 12LYF904   |
| <b>Eff. date</b>    | 10-16-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#8        |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 09-17-2014 |

|                                      |                                    |
|--------------------------------------|------------------------------------|
| <b>Feedback Device</b>               | <b>NO FEEDBACK</b>                 |
| <b>Front Face Code</b>               | <b>Standard</b>                    |
| <b>Front Shaft Indicator</b>         | <b>None</b>                        |
| <b>Haz Area Temp Code</b>            | <b>T3</b>                          |
| <b>Heater Indicator</b>              | <b>No Heater</b>                   |
| <b>High Voltage Full Load Amps</b>   | <b>39.0 a</b>                      |
| <b>Insulation Class</b>              | <b>F</b>                           |
| <b>Inverter Code</b>                 | <b>Inverter Duty</b>               |
| <b>KVA Code</b>                      | <b>H</b>                           |
| <b>Lifting Lugs</b>                  | <b>Standard Lifting Lugs</b>       |
| <b>Locked Bearing Indicator</b>      | <b>Locked Bearing</b>              |
| <b>Max Speed</b>                     | <b>1800 rpm</b>                    |
| <b>Motor Lead Exit</b>               | <b>Ko Box</b>                      |
| <b>Motor Lead Quantity/Wire Size</b> | <b>9 @ 8 AWG</b>                   |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>                |
| <b>Motor Standards</b>               | <b>NEMA</b>                        |
| <b>Motor Type</b>                    | <b>1264M</b>                       |
| <b>Mounting Arrangement</b>          | <b>F1</b>                          |
| <b>Number of Poles</b>               | <b>6</b>                           |
| <b>Overall Length</b>                | <b>30.28 IN</b>                    |
| <b>Power Factor</b>                  | <b>78</b>                          |
| <b>Product Family</b>                | <b>Super-E Chemical Processing</b> |
| <b>Pulley End Bearing Type</b>       | <b>Ball</b>                        |
| <b>Pulley Face Code</b>              | <b>Standard</b>                    |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</b>                    |
| <b>Rodent Screen</b>                 | <b>None</b>                        |
| <b>Service Factor</b>                | <b>1.15</b>                        |
| <b>Shaft Diameter</b>                | <b>2.125 IN</b>                    |
| <b>Shaft Extension Location</b>      | <b>Pulley End</b>                  |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>          |
| <b>Shaft Rotation</b>                | <b>Reversible</b>                  |
| <b>Shaft Slinger Indicator</b>       | <b>Shaft Slinger</b>               |
| <b>Speed</b>                         | <b>1180 rpm</b>                    |
| <b>Speed Code</b>                    | <b>Single Speed</b>                |

|                            |                     |
|----------------------------|---------------------|
| Starting Method            | Direct on line      |
| Thermal Device - Bearing   | None                |
| Thermal Device - Winding   | None                |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1          | None                |
| Winding Thermal 2          | None                |

**Nameplate**

| NP3241     |              |                    |          |    |              |       |           |      |           |         |                         |      |            |  |      |            |   |          |    |
|------------|--------------|--------------------|----------|----|--------------|-------|-----------|------|-----------|---------|-------------------------|------|------------|--|------|------------|---|----------|----|
| CAT.NO.    | ECP4117T     |                    |          |    | P/N          |       |           |      | ENCLOSURE |         |                         |      | TEFC       |  |      |            |   |          |    |
| SPEC.      | 12F904Y812G1 |                    |          | CC | 010A         | FRAME |           | 326T |           | S/N     |                         |      |            |  |      |            |   |          |    |
| HP         | 30           |                    |          |    | CLASS        |       | F         | HZ   | 60        | DES     | A                       |      |            |  |      |            |   |          |    |
| RPM        | 1180         |                    |          |    | RPM MAX      |       | 1800      |      | PH        | 3       | KVA-CODE                |      | H          |  |      |            |   |          |    |
| VOLT       | 230/460      |                    |          |    | MOTOR WEIGHT |       |           |      | 621       |         |                         |      |            |  |      |            |   |          |    |
| AMP        | 78/39        |                    |          |    | SER.F.       |       | 1.15      | PF   | 78        | ODE BRG |                         | 6312 | DE BRG     |  | 6312 |            |   |          |    |
| RATING     | 40C AMB-CONT |                    |          |    | NEMA-NOM-EFF |       |           |      | 93        |         | GREASE                  |      | POLYREX EM |  |      |            |   |          |    |
|            | SFA 88/44    |                    |          |    |              |       |           |      |           |         |                         |      |            |  |      |            |   |          |    |
|            |              |                    |          |    |              |       |           |      | INV.TYPE  |         | PWM                     |      |            |  |      |            |   |          |    |
| TEMP CODE  | T3           | INVERTER-TEMP-CODE |          |    |              | 200   |           |      |           |         |                         |      |            |  |      |            |   |          |    |
| TEMP =     | 200          | C HP FR            | 60       |    | C HP TO      |       | 90        |      |           |         |                         |      |            |  |      |            |   |          |    |
| CT HZ FROM | 1            |                    | CT HZ TO |    | 60           |       |           |      |           |         |                         |      |            |  |      |            |   |          |    |
| HTR-VOLTS  |              |                    | HTR-AMPS |    |              |       | HTR-WATTS |      |           |         | MAX. SPACE HEATER TEMP. |      |            |  |      | VT HZ FROM | O | VT HZ TO | 60 |

**Accessories**

| Part number | Description | Multiplier |
|-------------|-------------|------------|
| 12-1105     | C FACE KIT  | A8         |

**AC Induction Motor Performance Data**

Record # 47164

Typical performance - not guaranteed values

| Winding: 12WGY812-R001 |    |              | Type: 1264M                              |                           | Enclosure: TEFC |             |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------|-------------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                 |             |
| Rated Output (HP)      |    | 30           | Full Load Torque                         |                           | 133 LB-FT       |             |
| Volts                  |    | 230/460      | Start Configuration                      |                           | direct on line  |             |
| Full Load Amps         |    | 78/39        | Breakdown Torque                         |                           | 370 LB-FT       |             |
| R.P.M.                 |    | 1180         | Pull-up Torque                           |                           | 179 LB-FT       |             |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                 | 217 LB-FT   |
| NEMA Design Code       |    | A            | KVA Code                                 | Starting Current          |                 | 245 A       |
| Service Factor (S.F.)  |    | 1.15         |                                          | No-load Current           |                 | 17.2 A      |
| NEMA Nom. Eff.         |    | 93           | Power Factor                             | Line-line Res. @ 25°C     |                 | 0.22799 Ω   |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                 | 56°C        |
| S.F. Amps              |    |              |                                          | Temp. Rise @ S.F. Load    |                 | 68°C        |
|                        |    |              |                                          | Locked-rotor Power Factor |                 | 27.2        |
|                        |    |              |                                          | Rotor inertia             |                 | 12.2 lb-ft² |

**Load Characteristics 460 V, 60 Hz, 30 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 42     | 63     | 73     | 78     | 80     | 80     | 79   |
| Efficiency      | 89     | 92.7   | 93.4   | 93.1   | 92.4   | 91.4   | 92.7 |
| Speed           | 1196.5 | 1191.9 | 1188.3 | 1183.2 | 1178.2 | 1171.8 | 1180 |
| Line amperes    | 19.2   | 24.1   | 31     | 38.7   | 47.5   | 57.3   | 44   |

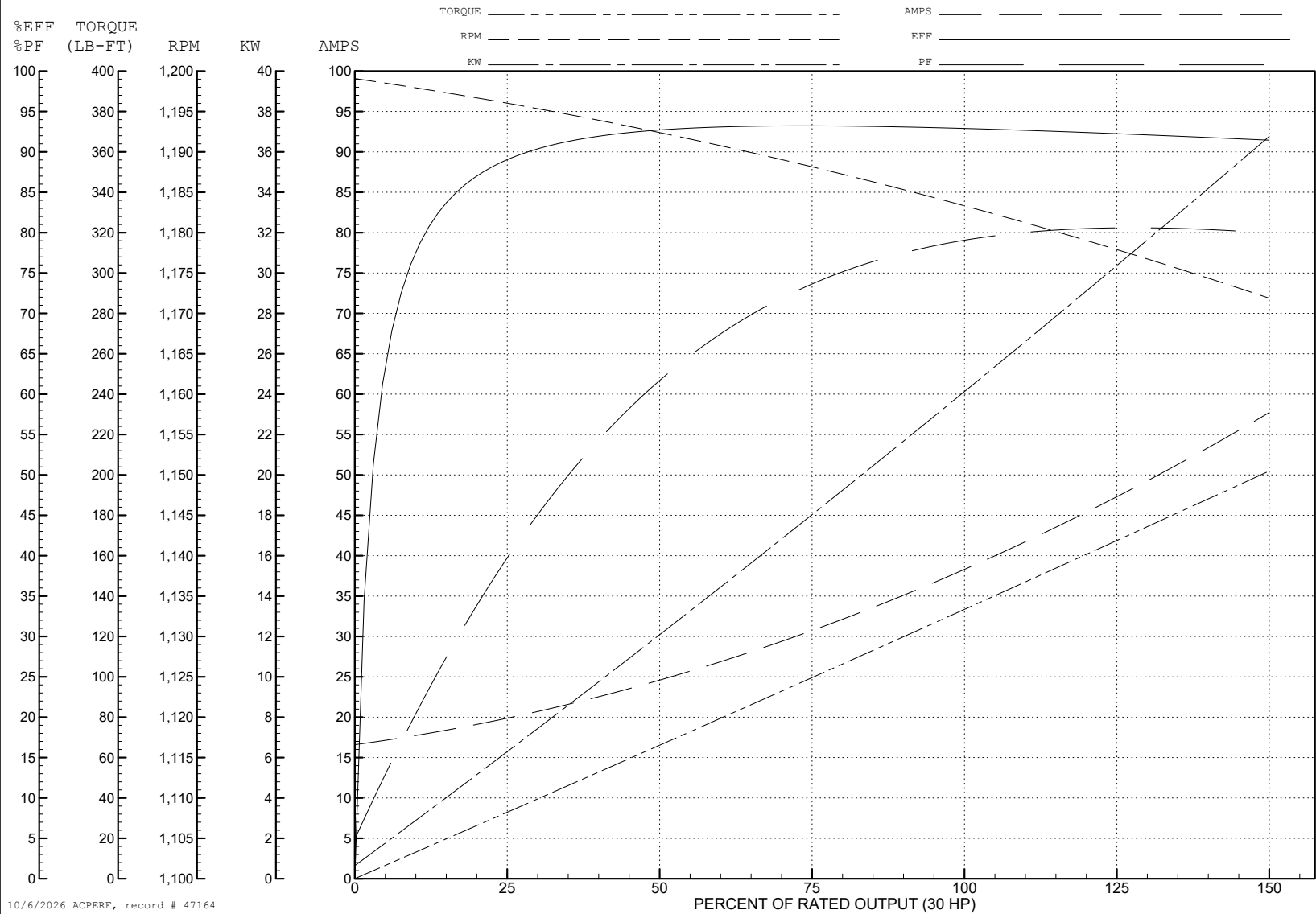
ABB Motors and Mechanical Inc.

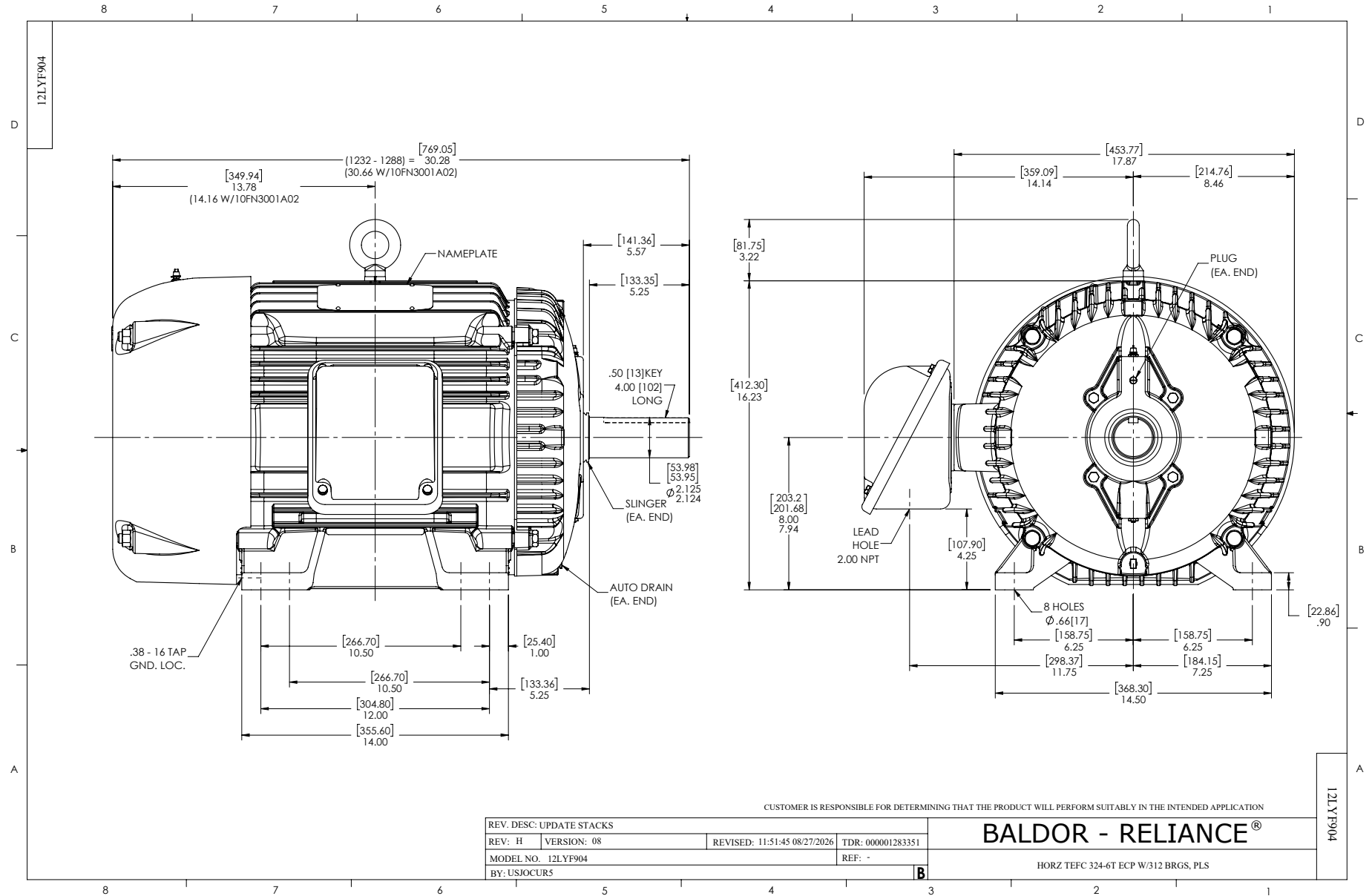
WINDING # 12WGY812

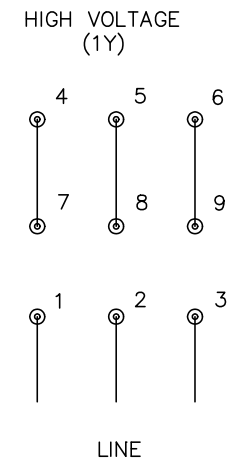
Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1180 RPM 460 V 1264M

TORQUES (LB-FT): PO=370 PU=179 LR=217 LRA=245







1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

3PH, DV, 9 LEADS