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# Customer information packet

## EM3546T

1HP, 1770RPM, 3PH, 60HZ, 143T, 3522M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

|                                |   |
|--------------------------------|---|
| Enclosure                      | TEFC  |
| Frame                          | 143T  |
| Frame Material                 | Steel   |
| Frequency                      | 60.00 Hz  |
| Haz Area Class and Group       | None  |
| Haz Area Division              | Not Applicable  |
| Motor Letter Type              | Three Phase   |
| Output @ Frequency             | 1.000 HP @ 60 HZ  |
| Phase                          | 3   |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ  |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ<br>208.0 V @ 60 HZ       |
| Agency Approvals               | CURUSEEV<br>NEMA PREMIUM                                    |
| Ambient Temperature            | 40 °C   |
| Auxillary Box                  | No Auxillary Box  |
| Auxillary Box Lead Termination | None  |
| Base Indicator                 | Rigid   |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                     |
| Blower                         | None  |
| Current @ Voltage              | 3.400 A @ 230.0 V<br>3.300 A @ 208.0 V<br>1.700 A @ 460.0 V |
| Design Code                    | B   |
| Drip Cover                     | No Drip Cover   |
| Duty Rating                    | CONT  |
| Efficiency @ 100% Load         | 85.5 %  |
| Electrically Isolated Bearing  | Not Electrically Isolated                                   |
| Feedback Device                | NO FEEDBACK   |
| Front Shaft Indicator          | None  |
| Heater Indicator               | No Heater   |

## Part detail

|              |            |
|--------------|------------|
| Revision     | B          |
| Type         | AC         |
| Mech. spec.  | 35AA001    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGZ805   |
| Layout       | 35LYAA001  |
| Eff. date    | 05-15-2024 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 04-10-2024 |

|                               |                     |
|-------------------------------|---------------------|
| High Voltage Full Load Amps   | 1.7 a               |
| Insulation Class              | F                   |
| Inverter Code                 | Inverter Ready      |
| KVA Code                      | N                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | No Locked Bearing   |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3522M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 4                   |
| Overall Length                | 13.28 IN            |
| Power Factor                  | 66                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | Standard            |
| Pulley Shaft Indicator        | Standard            |
| Rodent Screen                 | None                |
| RoHS Status                   | Y                   |
| Service Factor                | 1.15                |
| Shaft Diameter                | 0.875 IN            |
| Shaft Ground Indicator        | No Shaft Grounding  |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | No Slinger          |
| Speed                         | 1770 rpm            |
| Speed Code                    | Single Speed        |
| 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**

**NP3441LUA**

|                                   |               |             |           |            |   |              |   |
|-----------------------------------|---------------|-------------|-----------|------------|---|--------------|---|
| <b>CAT.NO.</b>                    | EM3546T       |             |           |            |   |              |   |
| <b>SPEC</b>                       | 35AA001Z805G3 |             |           |            |   |              |   |
| <b>HP</b>                         | 1             |             |           |            |   |              |   |
| <b>VOLTS</b>                      | 208-230/460   |             |           |            |   |              |   |
| <b>AMPS</b>                       | 3.3-3.4/1.7   |             |           |            |   |              |   |
| <b>RPM</b>                        | 1770          |             |           |            |   |              |   |
| <b>FRAME</b>                      | 143T          |             | <b>HZ</b> | 60         |   | <b>PH</b>    | 3 |
| <b>SF</b>                         | 1.15          | <b>CODE</b> | N         | <b>DES</b> | B | <b>CLASS</b> | F |
| <b>NEMA NOM. EFF</b>              | 85.5          | <b>PF</b>   | 66        |            |   |              |   |
| <b>RATING</b>                     | 40C AMB-CONT  |             |           |            |   |              |   |
| <b>CC</b>                         | 010A          |             |           |            |   |              |   |
| <b>ENCL</b>                       | TEFC          | <b>SER</b>  |           |            |   |              |   |
| <b>DE</b>                         | 6205          | <b>ODE</b>  | 6203      |            |   |              |   |
| <b>VPWM INVERTER READY</b>        | SFA 3.6/1.8   |             |           |            |   |              |   |
| <b>CT6-60H(10:1)VT3-60H(20:1)</b> |               |             |           |            |   |              |   |

**Accessories**

| <b>Part number</b> | <b>Description</b> | <b>Multiplier</b> |
|--------------------|--------------------|-------------------|
| 35-8762            | C FACE KIT         | A8                |
| 35EP1506A01SP      | D-FLANGE KIT       | A8                |

**AC Induction Motor Performance Data**

Record # 105401

Typical performance - not guaranteed values

| Winding: 35WGZ805-R001 |             | Type: 3522M            |  | Enclosure: TEFC          |        |
|------------------------|-------------|------------------------|--|--------------------------|--------|
| <b>Nameplate Data</b>  |             |                        | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                          |        |
| Rated Output (HP)      | 1           | Full Load Torque       | 2.97 LB-FT                                       |                          |        |
| Volts                  | 208-230/460 | Start Configuration    | direct on line                                   |                          |        |
| Full Load Amps         | 3.3-3.4/1.7 | Breakdown Torque       | 14.7 LB-FT                                       |                          |        |
| R.P.M.                 | 1770        | Pull-up Torque         | 7.5 LB-FT  |                          |        |
| Hz                     | 60 Phase    | 3                      | Locked-rotor Torque                              | 9.4 LB-FT                |        |
| NEMA Design Code       | B           | KVA Code               | N  | Starting Current         | 15.6 A |
| Service Factor (S.F.)  | 1.15        | No-load Current        | 1.2 A  |                          |        |
| NEMA Nom. Eff.         | 85.5        | Power Factor           | 66   | Line-line Res. @ 25°C    | 14.6 Ω |
| Rating - Duty          | 40C         | AMB-CONT               | Temp. Rise @ Rated Load                          |                          |        |
| S.F. Amps              | 3.6/1.8     | Temp. Rise @ S.F. Load |  |                          | 43°C   |
|                        |             |                        | Locked-rotor Power Factor                        | 58.6                     |        |
|                        |             |                        | Rotor inertia                                    | 0.159 lb-ft <sup>2</sup> |        |

**Load Characteristics 460 V, 60 Hz, 1 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 27   | 44   | 57   | 66   | 73   | 78   | 70   |
| Efficiency      | 71.1 | 81.8 | 85.2 | 86.5 | 86.6 | 86.3 | 86.6 |
| Speed           | 1796 | 1790 | 1784 | 1778 | 1772 | 1765 | 1774 |
| Line amperes    | 1.23 | 1.31 | 1.46 | 1.64 | 1.86 | 2.09 | 1.77 |

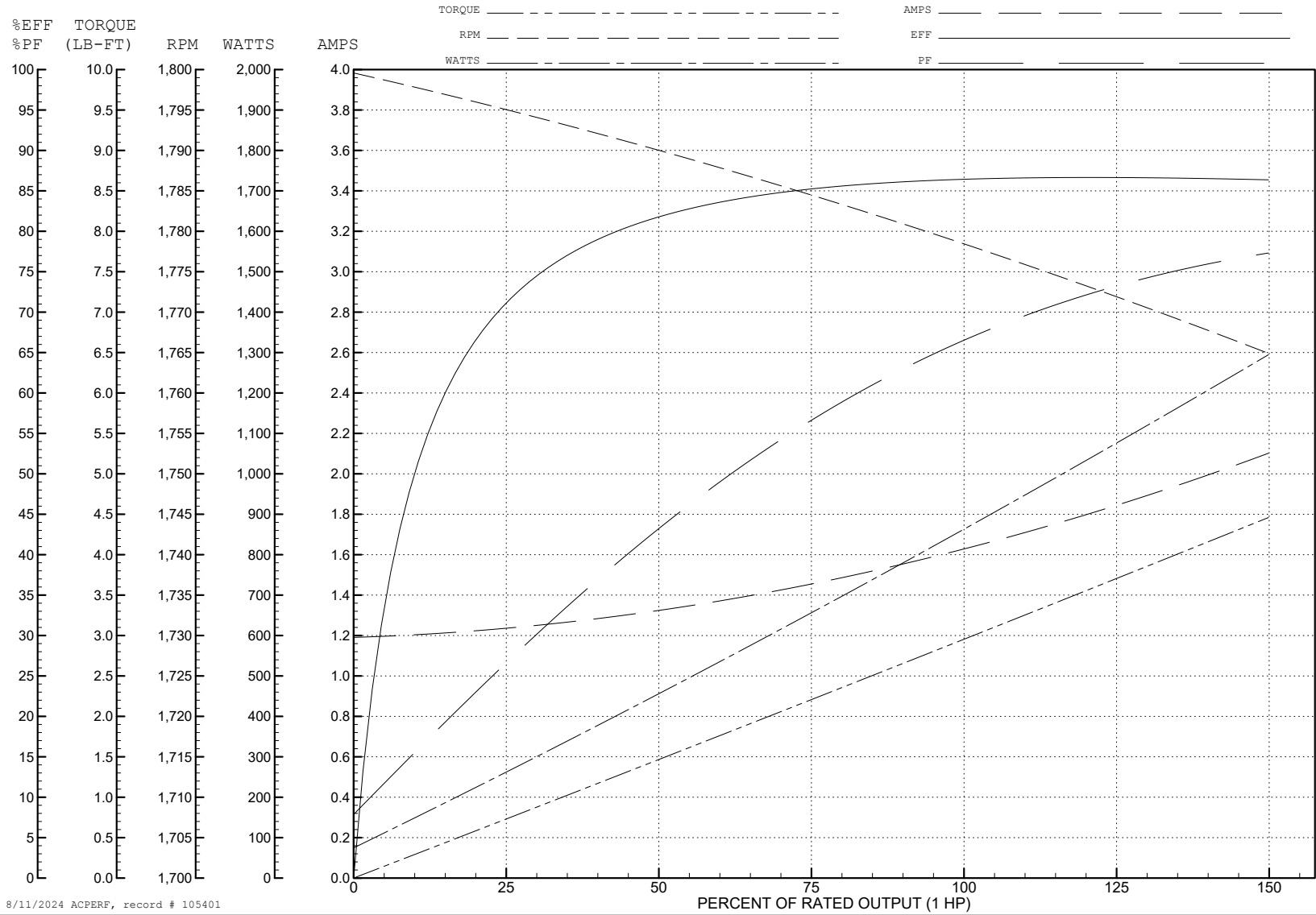
ABB Motors and Mechanical Inc.

WINDING # 35WGZ805

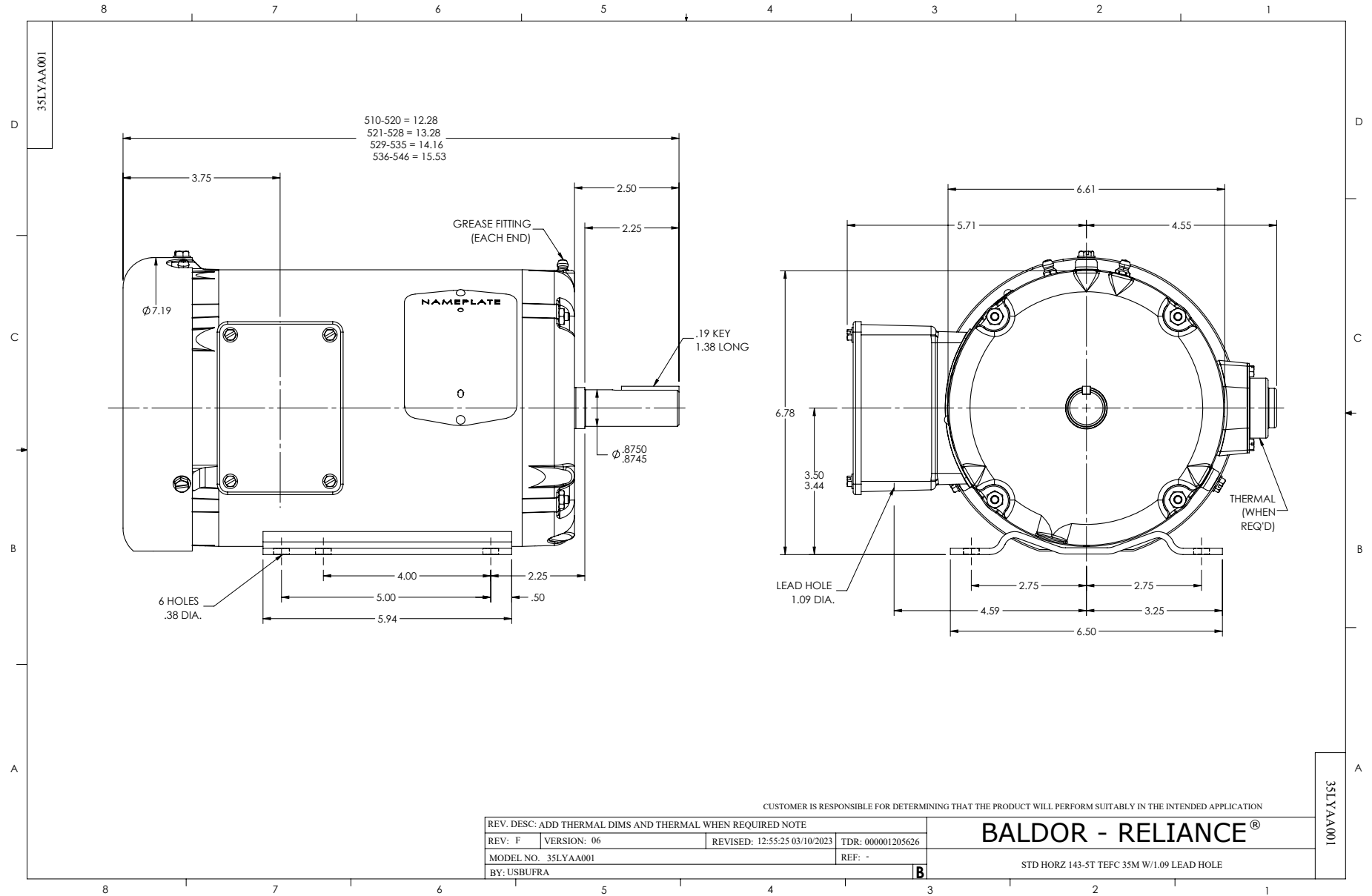
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1770 RPM 460 V 3522M

TORQUES (LB-FT): PO=14.7 PU=7.5 LR=9.4 LRA=15.6

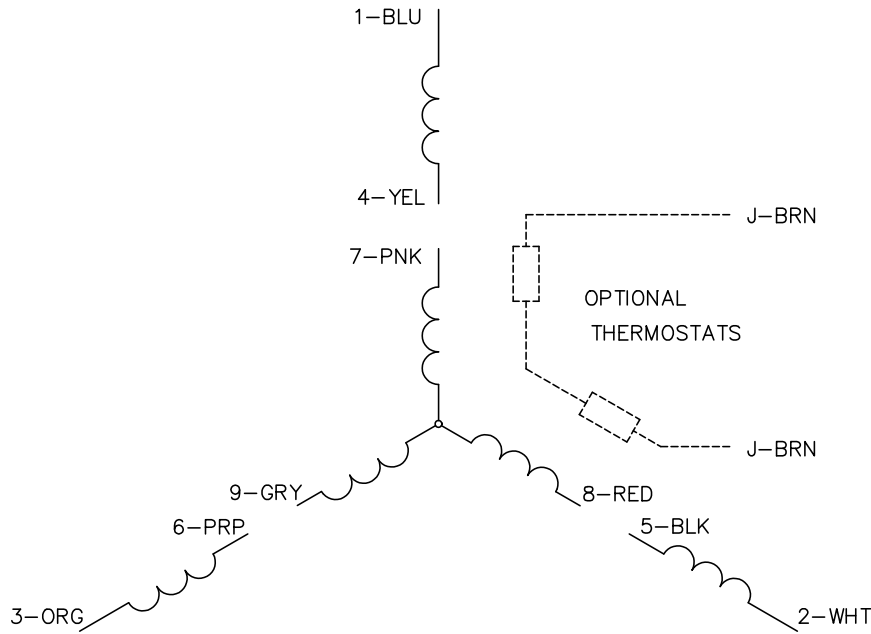


8/11/2024 ACPERF, record # 105401

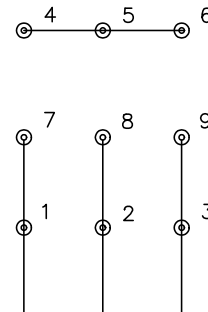




CD0005

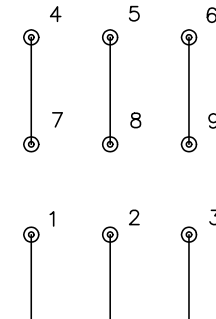


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

NOTES:

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.

CD0005

|   |         |                         |              |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| S00000                                    |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS