



Customer information packet

ECS101M0H2DC4

2HP, 1800RPM, 3PH, 60HZ, 145TC, 3524B, TEFC, F1

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|--|
| Enclosure | TEFC |
| Frame | 145TC |
| Frame Material | Steel |
| Frequency | 60.00 Hz |
| Haz Area Class and Group | None |
| Haz Area Division | Not Applicable |
| Motor Letter Type | Brushless Wound Field PM Rotor |
| Output @ Frequency | 2.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| Agency Approvals | WEEE CULUS |
| Ambient Temperature | 40 °C |
| Auxiliary Box | NO AUXILLARY BOX |
| Auxiliary Box Lead Termination | None |
| Base Indicator | No Mounting |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | None |
| Constant Torque Speed Range | 6 |
| Current @ Voltage | 1.500 A @ 460.0 V 3.000 A @ 230.0 V |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 88.5 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 1.5 a |
| Insulation Class | F |

Part detail

| | |
|--------------|------------|
| Revision | C |
| Type | AC |
| Mech. spec. | 35E5350 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 35WGG983 |
| Layout | 35LYE5350 |
| Eff. date | 02-12-2026 |
| CD Diagram | CD0005A25 |
| Poles | 04 |
| Leads | 9#16 Y |
| Proprietary | False |
| Created date | 03-15-2024 |

| | |
|--------------------------------------|---------------------|
| Inverter Code | Inverter Duty |
| KVA Code | N |
| Lifting Lugs | No Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Motor Lead Quantity/Wire Size | 9 @ 16 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3524B |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 13.29 IN |
| Power Factor | 93 |
| Product Family | General Purpose |
| Pulley Face Code | C-Face |
| Rodent Screen | None |
| RoHS Status | Y |
| Service Factor | 1.00 |
| Shaft Diameter | 0.875 IN |
| Shaft Ground Indicator | Shaft Grounding |
| Shaft Rotation | Reversible |
| Speed | 1800 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

| NP3968A01A01 | | | | | | | | | |
|---------------------|-----------------------------|----------------|------------------|--------------|-------------|-----------|----|--|--|
| CAT.NO. | ECS101M0H2DC4 | | | | | | | | |
| SPEC. | 35E5350G983 | | | | | | | | |
| FRAME | 145TC | | ENCL. | TEFC | IP | 54 | | | |
| HP | 2 | 40 | C AMB | | CONT | | | | |
| NOM. EFF. | 91.9 | PF | 93 | SF | 1.5 | | | | |
| VOLTS | 230/460 | | FLA | 4.4/2.2 | | | | | |
| RPM | 1800 | RPM-MAX | 4000 | | | | | | |
| HZ | 60 | PH. | 3 | CLASS | F | | | | |
| BEMF (V) | 148/296 | | RS (OHMS) | 2.9/11.7 | | | | | |
| LD (MH) | 19.7/78.9 | | LQ (MH) | 101.5/406 | | | | | |
| VPWM | CHP | 60 | TO | 133 | | | | | |
| CT | 6 | TO | 60 | VT | 6 | TO | 60 | | |
| MATCHED INV | ACS380-04XX-04A8-1 / 02A6-4 | | | | | | | | |
| DE | 6203 | | ODE | 6203 | | | | | |
| SERIAL # | | | | | | | | | |

| | | | | | | | |
|----------|------|----------|--------------|------------|-----------|-------|-------------------|
| Volts | 460 | Max RPM | 4000 | Conn Diag. | CD0006B03 | Leads | 3 |
| Amps | 1.75 | Max Amps | | Cs Diagram | CS1126 | BEMF | 296 |
| HP | 2 | VFD# | ECIN4A2P2 | | | LD | 78.9 |
| RPM | 1800 | S.F. | 1.00 | | | LQ | 406 |
| Phase/Hz | 3/60 | Rating | 50C AMB-CONT | | | Rs | 11.7741 Meas. L-L |


60034-2-3 Motor Performance at Standardized Operating Points

| | RPM | % Speed | LB-FT | % Torque | HP | Efficiency | Loss (% FL) | Watts Loss (W) |
|----|------|---------|-------|----------|-----|------------|-------------|----------------|
| P1 | 1622 | 90% | 5.8 | 100% | 1.8 | 91.2 | 8.59% | 130 |
| P2 | 895 | 50% | 5.8 | 100% | 1.0 | 86.9 | 7.45% | 112 |
| P3 | 448 | 25% | 5.8 | 100% | 0.5 | 80.2 | 6.10% | 92 |
| P4 | 1623 | 90% | 2.9 | 50% | 0.9 | 91.7 | 4.08% | 62 |
| P5 | 900 | 50% | 2.9 | 50% | 0.5 | 89.7 | 2.85% | 43 |
| P6 | 898 | 50% | 1.5 | 25% | 0.2 | 88.8 | 1.56% | 24 |
| P7 | 445 | 25% | 1.5 | 25% | 0.1 | 84.8 | 1.11% | 17 |

61800-9-2 PDS Performance at Reference Operating Points

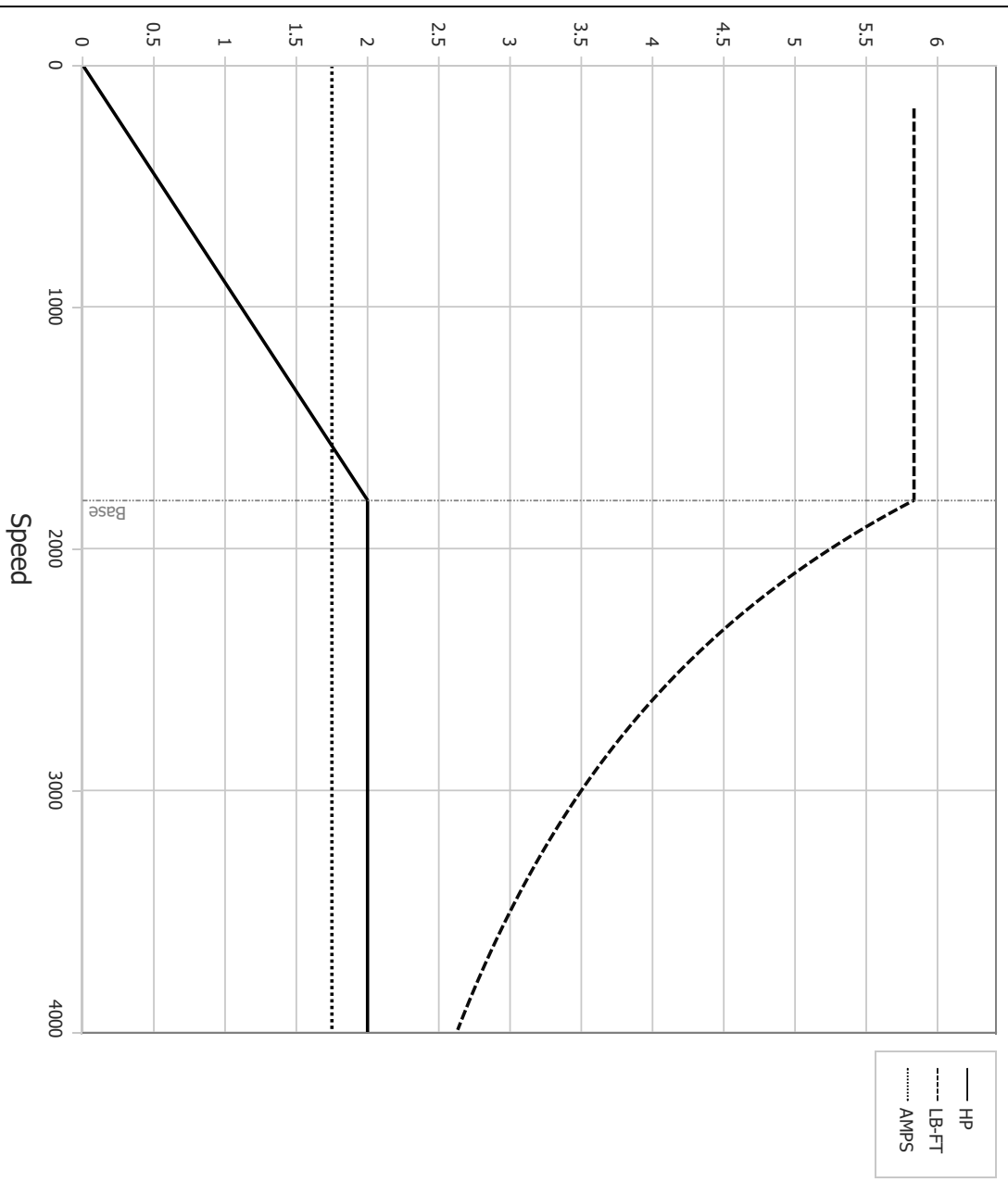
| | RPM | % Speed | LB-FT | % Torque | HP | System Efficiency | Loss (% FL) | Watts Loss (W) |
|----|------|---------|-------|----------|-----|-------------------|-------------|----------------|
| P1 | 1806 | 100% | 5.8 | 100% | 2.0 | 88.6 | 12.70% | 192 |
| P2 | 895 | 50% | 5.8 | 100% | 1.0 | 82.7 | 10.27% | 155 |
| P3 | 299 | 17% | 5.8 | 100% | 0.3 | 66.2 | 8.39% | 127 |
| P4 | 1807 | 100% | 2.9 | 50% | 1.0 | 89.0 | 6.15% | 93 |
| P5 | 900 | 50% | 2.9 | 50% | 0.5 | 83.4 | 4.92% | 74 |
| P6 | 300 | 17% | 2.9 | 50% | 0.2 | 66.8 | 4.10% | 62 |
| P7 | 898 | 50% | 1.5 | 25% | 0.2 | 78.9 | 3.30% | 50 |
| P8 | 298 | 17% | 1.5 | 25% | 0.1 | 60.7 | 2.65% | 40 |

Points not taken in certified order.

| | | | | |
|---|---------|-------------------|------------------------------------|--|
|  | DR By: | <u>R & D</u> | AC MOTOR PERFORMANCE CURVES | 35WGG963 35-0000-1627 Test - 111378 |
| | CK By: | <u>USTOSAN</u> | | |
| | App By: | <u>USJAROB1</u> | | |
| Date: | | <u>10/02/2024</u> | | |

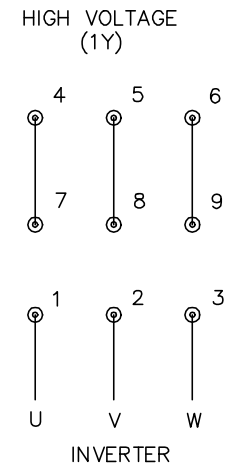
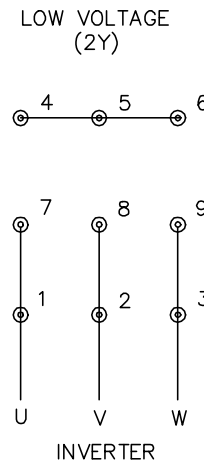
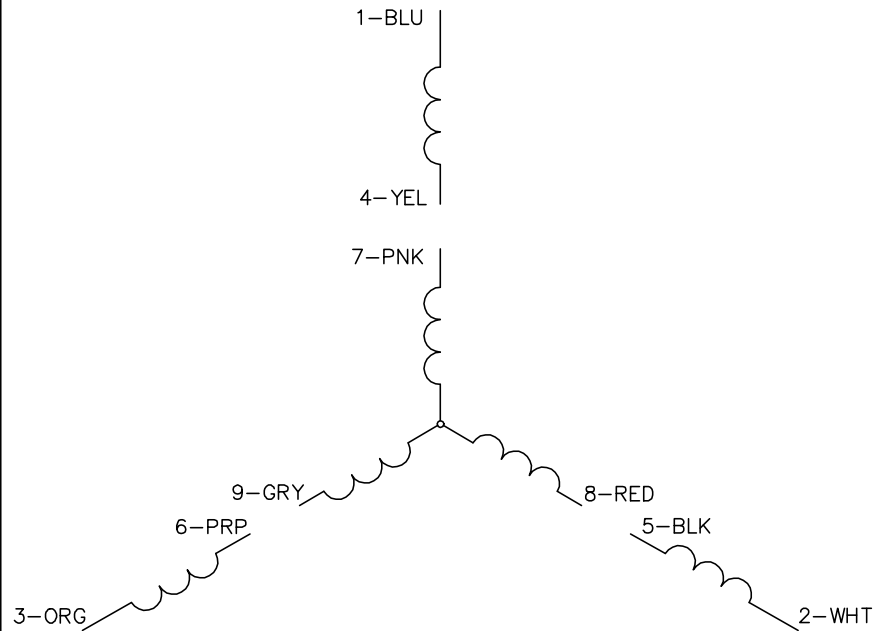
| | | | | | | | |
|----------|------|----------|--------------|------------|-----------|-------|------------------|
| Volts | 460 | Max RPM | 4000 | Conn Diag. | CD0006B03 | Leads | 3 |
| Amps | 1.75 | Max Amps | | Cs Diagram | CS1126 | BEMF | 296 |
| HP | 2 | VFD # | ECIN4A2P2 | | | LD | 78.9 |
| RPM | 1800 | S.F. | 1.00 | | | LQ | 406 |
| Phase/Hz | 3/60 | Rating | 50C AMB-CONT | | | Rs | 11.7741 Meas L-L |

Constant Duty Operating Range



| | | | |
|---------------------------------|---|---|---|
| <p>BALDOR • RELIANCE</p> | DR By: <u> R & D </u> | <p>AC MOTOR PERFORMANCE CURVES</p> | <p>35WGG963 35-0000-1627 Test - 111378</p> |
| | CK By: <u> USTOSAN </u> APP By: <u> USJAROB1 </u> Date: <u> 10/02/2024 </u> | | |

CD0005A25



NOTES:

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

CD0005A25

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|----------------------|------------------------------|-------------------|
| REV. DESC: NEW | | |
| REV. LTR: - | VERSION: 00 | TDR: 000001135746 |
| FILE: \AAA\00253\082 | REVISED: 01:10:57 03/30/2020 | BY: ENMARSO |
| MTL: - | © □ | |

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3PH, DV, 9 LEADS, ECS
SH 1 of 1