

Product Information Packet

WCM3710T

7.5HP,1770RPM,3PH,60HZ,213TCZ,3732M,TEFC

BALDOR • RELIANCE Product Information Packet: WCM3710T - 7.5HP,1770RPM,3PH,60HZ,213TCZ,3732M,TEFC

| Part Detail | | | | | | | | | |
|---|--------|-------------|------------|-------------|--------|---------------|------------|--|--|
| Revision: F Status: INA/A Change #: Proprietary: No | | | | | | | | | |
| Type: | AC | Elec. Spec: | 37WGS150 | CD Diagram: | CD0005 | Mfg Plant: | | | |
| Mech. Spec: | 37N046 | Layout: | 37LYN046 | Poles: | 04 | Created Date: | 06-23-2010 | | |
| Base: | RG | Eff. Date: | 03-08-2016 | Leads: | 9#14 | | | | |

Specs

| Catalog Number: | WCM3710T | Insulation Class: | F |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Enclosure: | TEFC | Inverter Code: | Not Inverter |
| Frame: | 213TCZ | KVA Code: | К |
| Frame Material: | Steel | Lifting Lugs: | Standard Lifting Lugs |
| Output @ Frequency: | 7.500 HP @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Motor Lead Quantity/Wire Size: | 9 @ 14 AWG |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Lead Exit: | Ко Вох |
| | 230.0 V @ 60 HZ | Motor Lead Termination: | Flying Leads |
| | 208.0 V @ 60 HZ | Motor Type: | 3731M |
| XP Division: | Not Applicable | Mounting Arrangement: | F1 |
| Agency Approvals: | CSA | Power Factor: | 77 |
| | UR | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | C-Face |
| Base Indicator: | RG | Pulley Shaft Indicator: | Tapped & Key |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | Shaft Extension Location: | Pulley End |
| Current @ Voltage: | 10.100 A @ 460.0 V | Shaft Ground Indicator: | No Shaft Grounding |

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| | 20.200 A @ 230.0 V | Shaft Rotation: | Reversible | |
|--|--------------------|-----------------------------|---------------------|--|
| | 22.000 A @ 208.0 V | Shaft Slinger Indicator: | No Slinger | |
| Design Code: | А | Speed Code: | Single Speed | |
| Drip Cover: | No Drip Cover | Motor Standards: | NEMA | |
| Duty Rating: | CONT | Starting Method: | Direct on line | |
| Electrically Isolated Bearing: Not Electrically Isolated | | Thermal Device - Bearing: | None | |
| Feedback Device: | NO FEEDBACK | Thermal Device - Winding: | None | |
| Front Face Code: | Standard | Vibration Sensor Indicator: | No Vibration Sensor | |
| Front Shaft Indicator: | None | Winding Thermal 1: | None | |
| Heater Indicator: | No Heater | Winding Thermal 2: | None | |

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| Nameplate NP1256L | | | | | | | | |
|-------------------|----------------|--------------------|-----------------|---|-------|--------------|-------|---|
| | | | | | | | | |
| CAT.NO. | WCM3710T | | | | | | | |
| SPEC. | 37N046S150H1 | | | | | | | |
| HP | 7.5 | | | | | | | |
| VOLTS | 208-230/460 | | | | | | | |
| AMP | 22-20.2/10.1 | | | | | | | |
| RPM | | | | | | | | |
| FRAME | 213TCZ | 13TCZ HZ 60 | | | | HZ 60 | | |
| SER.F. | 1.15 | | CODEK | | DES A | | CLASS | F |
| NEMA-NOM-EFF | 89.5 | | PF 77 | | | | | |
| RATING | 40C AMB-CONT | | | | | | | |
| cc | USABLE AT 208V | | | | | | | |
| DE | 6309 | | ODE 6206 | | | | | |
| ENCL | TEFC | SN | | • | | | - | |
| | | <u>.</u> | | | | | | |

AC Induction Motor Performance Data

Record # 22653 - Typical performance - not guaranteed values

| Winding: 37WGS150-R001 Type: 3732M Enclosure: TEFC |
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| Nan | 460 V, 60 Hz: High Voltage Connection | | | | | |
|-----------------------|--|-------------------|-------------------------|---------------------------|--|--|
| Rated Output (HP) | | 7.5 | | Full Load Torque | | |
| Volts | | 208-230/460 | | Start Configuration | | |
| Full Load Amps | | 22-20.2/10.1 | | Breakdown Torque | | |
| R.P.M. | | 1770 | Pull-up Torque | | | |
| Hz | 60 | 60 Phase 3 | | Locked-rotor Torque | | |
| NEMA Design Code | А | A KVA Code K | | Starting Current | | |
| Service Factor (S.F.) | | 1.15 | No-load Current | | | |
| NEMA Nom. Eff. | 89.5 | 89.5 Power Factor | | Line-line Res. @ 25°C | | |
| Rating - Duty | | 40C AMB-CONT | Temp. Rise @ Rated Load | | | |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | | |
| | | | | Locked-rotor Power Factor | | |
| | | | | Rotor inertia | | |

| 460 V, 60 Hz: High Voltage Connection | |
|--|----------------|
| Full Load Torque | 22.14 LB-FT |
| Start Configuration | direct on line |
| Breakdown Torque | 78.19 LB-FT |
| Pull-up Torque | 34.99 LB-FT |
| Locked-rotor Torque | 48.08 LB-FT |
| Starting Current | 78.69 A |
| No-load Current | 5.26 A |
| Line-line Res. @ 25°C | 1.39 Ω |
| Temp. Rise @ Rated Load | 69°C |
| Temp. Rise @ S.F. Load | 81°C |
| Locked-rotor Power Factor | 38.8 |
| Rotor inertia | 0.787 LB-FT2 |

Load Characteristics 460 V, 60 Hz, 7.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|-------|------|-------|------|
| Power Factor | 38 | 58 | 71 | 77 | 81 | 83 | 79 |
| Efficiency | 81.5 | 88.2 | 89.6 | 90 | 88.8 | 88 | 89.4 |
| Speed | 1792 | 1786 | 1778 | 1771 | 1762 | 1752 | 1765 |
| Line amperes | 5.74 | 6.79 | 8.35 | 10.08 | 12.2 | 14.39 | 11.4 |

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values





