

Technical Documentation

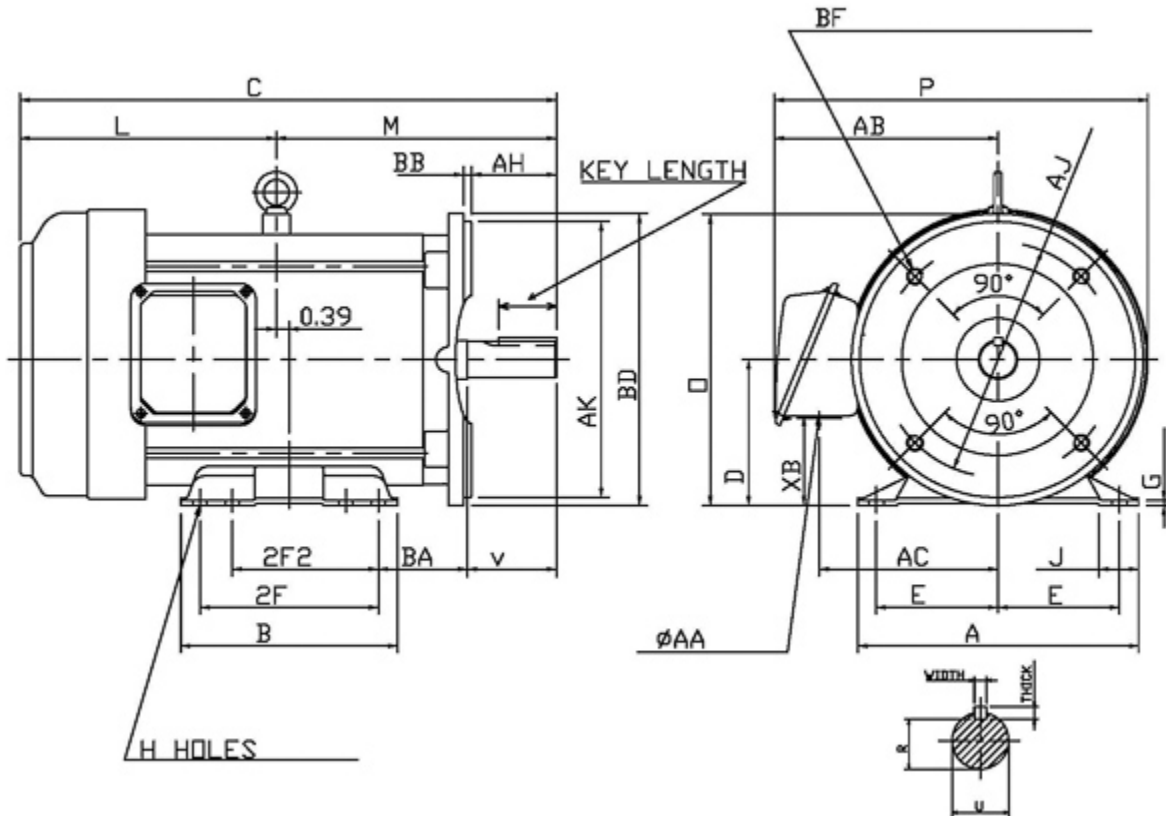
RF0102C

Rolled Steel TEFC | AEGH

Date: December 1, 2016

Dimensional Drawing

| Catalogue | Model | HP | Pole | kW | Rating | Voltage | Hz | RPM |
|-----------|-------|----|------|-----|------------|-------------|----|------|
| RF0102C | AEGH | 10 | 2 | 7.5 | Continuous | 230 / 460 V | 60 | 3600 |



| Frame Size | Mounting | | | | | A | B | C | CD | D | |
|------------------|----------|------|----------|--------|--------------------|-------------|------------|-------|------------------------------|------------|---------|
| | E | 2F | 2F2 | H | BA | | | | | | |
| 215TC | 4.25 | 7 | 5.5 | 0.41 | 3.5 | 9.7 | 8.2 | 20.5 | | 5.25 | |
| G | J | K | L | M | O | P | T | Key | | | Keyseat |
| | | | | | | | | Width | Thick | Length | R |
| 0.18 | 1.22 | | 9.67 | 10.83 | 10.53 | 10.74 | 1.63 | 0.312 | 0.312 | 2.41 | 1.201 |
| Terminal Housing | | | Aux Box | | | C/D Flange | | | | | |
| AA | AB | AC | XB | AE | AX | BB | AH | AK | BD | AJ | BF |
| 1.38 | 8.16 | 6.38 | 2.81 | | | 0.25 | 3.12 | 8.5 | 9 | 7.25 | 1/2-13 |
| Shaft Extension | | | Bearings | | Approx. Weight Lbs | SPL dBA/3ft | Ins. Class | S.F. | Drive Method | Dimensions | |
| N-W | U | V | DE | NDE | | | | | | | |
| 3.38 | 1.375 | 3.3 | 6208ZZ | 6206ZZ | 162 | 70 | F | 1.15 | Direct Coupling / Belt Drive | Inches | |

Technical Data Sheet

Motor Type: AEGH

Catalogue No: RF0102C

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 10 | 2 | 3525 | 215TC | 230 / 460 | 60 | 3 |
| Enclosure | Ins. Class | Service Factor | Time Rating | NEMA Design | Rated Amb. | Rated Altitude |
| TEFC | F | 1.15 | Continuous | B | -40 to 40 °C | <3300 ft |

Typical Performance

| Efficiency (%) | | | | Power Factor (%) | | |
|-------------------|-----------------------------|---------------------------------|--------------------------------------|---------------------|-------------|--------------------------------|
| Full Load | | 3/4 Load | 1/2 Load | Full Load | 3/4 Load | 1/2 Load |
| Nom. | Min. | | | | | |
| 91.0 | 89.5 | 91.0 | 91.0 | 86.0 | 82.0 | 74.0 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 15.07 | 220 | 205 | 275 | 6.6 / 3.3 | 23.9 / 12.0 | 162 / 81 |
| NEMA KVA Code | Inertia (WR ²) | | | Safe Stall Time (s) | | Noise Level Sound Press. dB(A) |
| | Rotor (lb-ft ²) | NEMA Load (lb-ft ²) | Max. Allowable (lb-ft ²) | Cold | Hot | |
| H | 0.443 | 10.9 | 20 | 17 | 12 | 70 |

VFD Duty Information

| Speed Range | | | VFD | | S.F. |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type | |
| 6-60Hz | 3-60Hz | 60-90Hz | ≤ 5 kHz | VPWM or CPWM | 1.0 Only |

Additional Information

| Bearings | | Approx. Weight |
|----------|--------|----------------|
| DE | NDE | lbs |
| 6208ZZ | 6206ZZ | 162 |

Hazardous Locations Information

| | |
|----------------------------|-------|
| N/A | |
| 0 | |
| 0 | |
| Temp Code (Sinewave / VFD) | 0 / 0 |

Connection Diagram

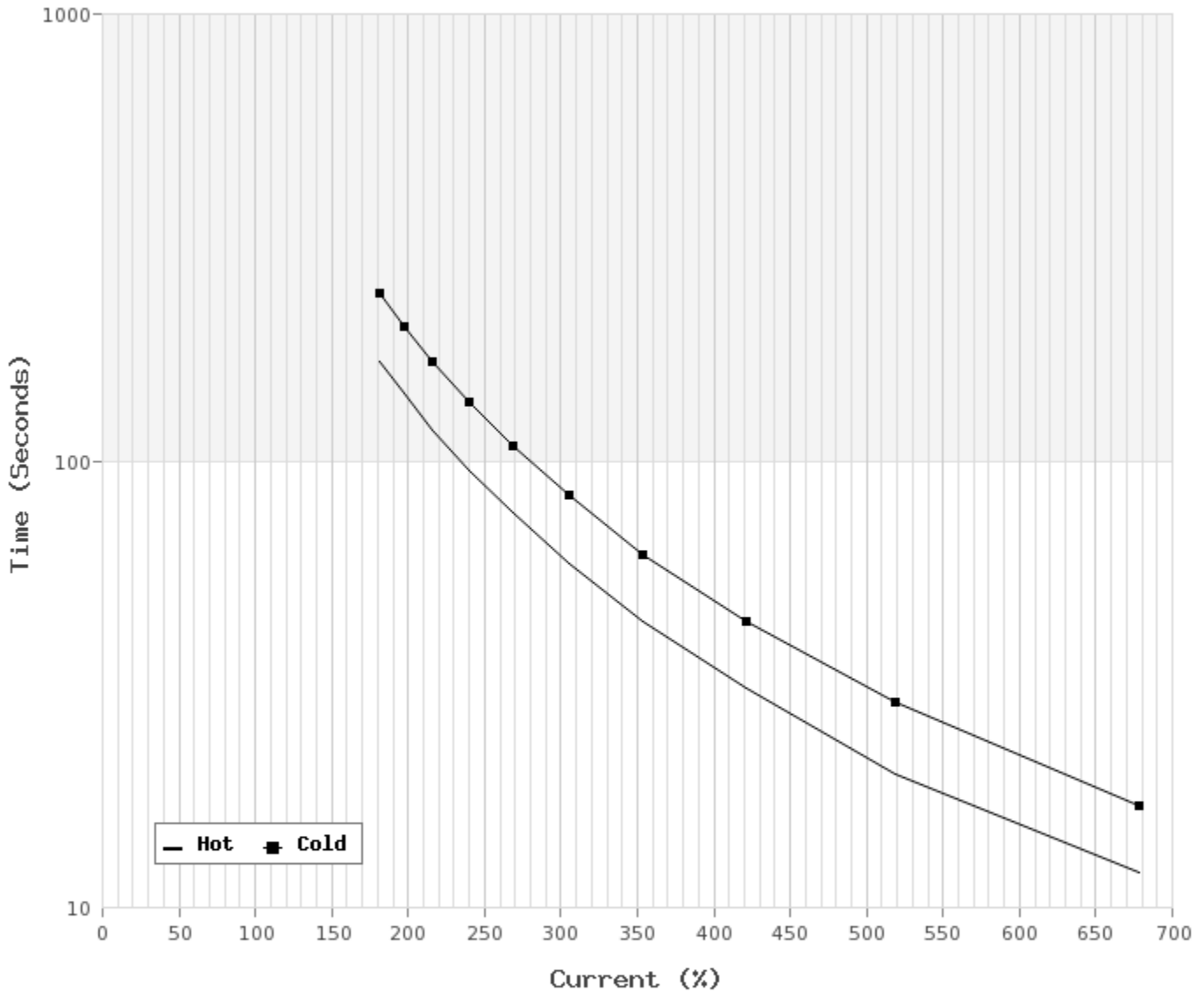


| 12 LEAD DUAL VOLTAGE WYE/DELTA | | | | | | |
|--------------------------------|------------|---------|-------------|-------------|-------------|-------------------------|
| VOLTAGE | CONNECTION | | L1 | L2 | L3 | JOIN |
| HIGH | START | WYE | 1 | 2 | 3 | 4&7,5&8,6&9 10&11&12 |
| | RUN | DELTA | 1,12 | 2,10 | 3,11 | 4&7,5&8,6&9 |
| LOW | START | 2 WYE | 1,7 | 2,8 | 3,9 | 4&5&6 10&11&12 |
| | RUN | 2 DELTA | 1,6,7 12 | 2,4,8 10 | 3,5,9 11 | |

WD_12YD

Thermal Limit Curves

| | | | | | |
|------------------|-----------------|-----------------------|------|---------------------------|---------------|
| Motor Type: AEGH | | Catalogue No: RF0102C | | Family: Rolled Steel TEFC | |
| HP | 10 | Safe Stall Time | | Full Load A | 23.9 / 12.0 A |
| Voltage | 230 / 460V 60Hz | Hot | 12 s | Locked Rotor A | 677 / 677 % |
| RPM | 3600 | Cold | 17 s | Locked Rotor A | 162.0 / 81 A |



T-N and I-N Curves

| | | | | | |
|------------------|-----------------|-----------------------|-------------|---------------------------|----------------|
| Motor Type: AEGH | | Catalogue No: RF0102C | | Family: Rolled Steel TEFC | |
| HP | 10 | Full Load T | 15.07 lb-ft | Full Load A | 23.9 / 12.0 A |
| Voltage | 230 / 460V 60Hz | Locked Rotor T | 220 % | Locked Rotor A | 162.0 / 81.0 A |
| RPM | 3600 | Pull Up T | 205 % | Break Down T | 275 % |

