

Technical Documentation

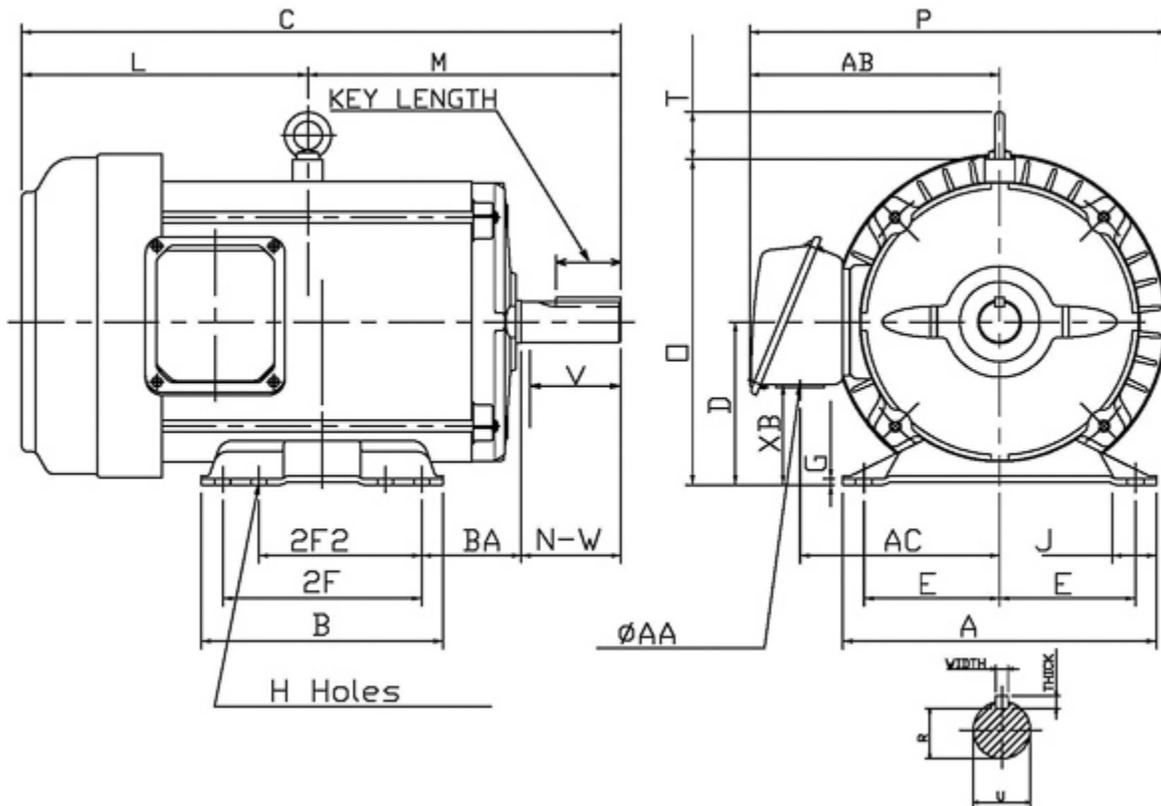
RF0054

Rolled Steel TEFC | AEGH

Date: December 1, 2016

Dimensional Drawing

| | | | | | | | | |
|-----------|-------|----|------|-----|------------|-------------|----|------|
| Catalogue | Model | HP | Pole | kW | Rating | Voltage | Hz | RPM |
| RF0054 | AEGH | 5 | 4 | 3.7 | Continuous | 230 / 460 V | 60 | 1800 |



| Frame Size | Mounting | | | | | A | B | C | CD | D | |
|------------------|----------|------|----------|--------|-----------------------|----------------|---------------|-------|---------------------------------|------------|--------------|
| | E | 2F | 2F2 | H | BA | | | | | | |
| 184T | 7.5 | 5.5 | 4.5 | 0.41 | 2.75 | 8.66 | 6.68 | 16.55 | | 4.5 | |
| G | J | K | L | M | O | P | T | Key | | | Keyseat R |
| | | | | | | | | Width | Thick | Length | |
| 0.16 | 1.22 | | 7.91 | 8.64 | 8.99 | 9.25 | 1.31 | 0.25 | 0.25 | 1.78 | 0.986 |
| Terminal Housing | | | Aux Box | | | C/D Flange | | | | | |
| AA | AB | AC | XB | AE | AX | BB | AH | AK | BD | AJ | BF |
| 1.1 | 6.9 | 5.51 | 2.77 | | | | | | | | |
| Shaft Extension | | | Bearings | | Approx. Weight Lbs | SPL dBA/3ft | Ins. Class | S.F. | Drive Method | Dimensions | |
| N-W | U | V | DE | NDE | | | | | | | |
| 2.75 | 1.125 | 2.7 | 6206ZZ | 6205ZZ | 82 | 55 | F | 1.15 | Direct Coupling / Belt Drive | Inches | |

Technical Data Sheet

Motor Type: AEGH

Catalogue No: RF0054

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 5 | 4 | 1740 | 184T | 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. | | | | | |
| 89.5 | 87.5 | 90.0 | 89.0 | 80.0 | 73.5 | 61.0 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 15.09 | 215 | 210 | 300 | 3.3 / 1.6 | 13.1 / 6.5 | 92 / 46 |
| 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 | |
| J | 0.416 | 26.8 | 99 | 30 | 21 | 55 |

VFD Duty Information

| Speed Range | | | VFD | | S.F. |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type | |
| 6-60Hz | 3-60Hz | 60-120Hz | ≤ 5 kHz | VPWM or CPWM | 1.0 Only |

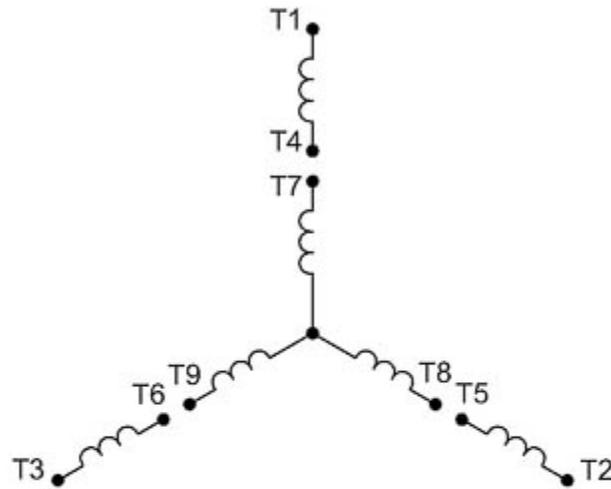
Additional Information

| Bearings | | Approx. Weight |
|----------|--------|----------------|
| DE | NDE | lbs |
| 6206ZZ | 6205ZZ | 82 |

Hazardous Locations Information

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

Connection Diagram

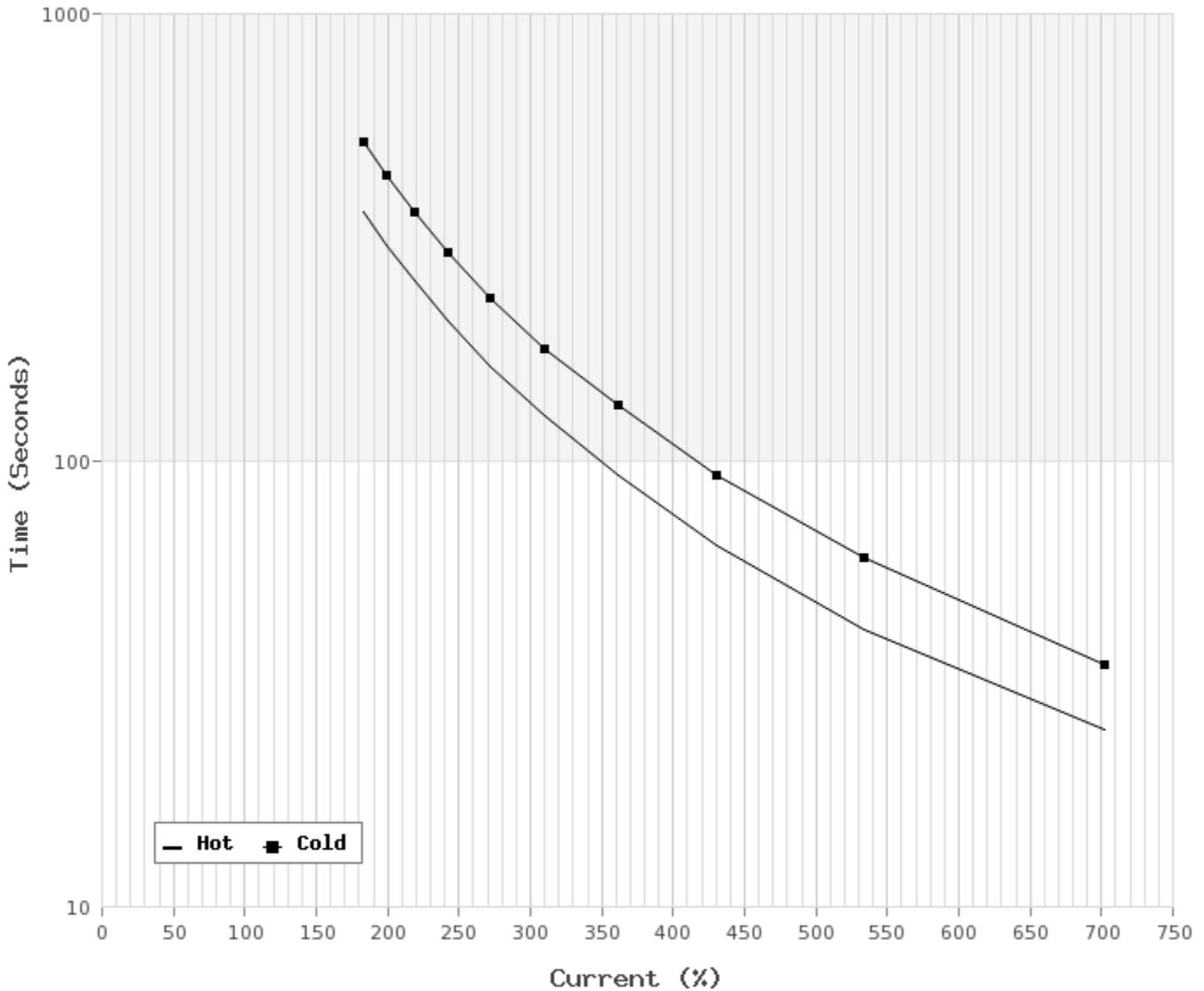


| 9 LEAD DUAL VOLTAGE WYE | | | | | |
|-------------------------|-------|-----|-----|-----|-------------|
| VOLTAGE | CONN. | L1 | L2 | L3 | JOIN |
| HIGH | WYE | 1 | 2 | 3 | 4&7,5&8,6&9 |
| LOW | 2 WYE | 1,7 | 2,8 | 3,9 | 4&5&6 |

WD_9Y

Thermal Limit Curves

| | | | | | |
|------------------|-----------------|----------------------|------|---------------------------|--------------|
| Motor Type: AEGH | | Catalogue No: RF0054 | | Family: Rolled Steel TEFC | |
| HP | 5 | Safe Stall Time | | Full Load A | 13.1 / 6.5 A |
| Voltage | 230 / 460V 60Hz | Hot | 21 s | Locked Rotor A | 703 / 703 % |
| RPM | 1800 | Cold | 30 s | Locked Rotor A | 92.0 / 46 A |



T-N and I-N Curves

| | | | | | |
|------------------|-----------------|----------------------|-------------|---------------------------|---------------|
| Motor Type: AEGH | | Catalogue No: RF0054 | | Family: Rolled Steel TEFC | |
| HP | 5 | Full Load T | 15.09 lb-ft | Full Load A | 13.1 / 6.5 A |
| Voltage | 230 / 460V 60Hz | Locked Rotor T | 215 % | Locked Rotor A | 92.0 / 46.0 A |
| RPM | 1800 | Pull Up T | 210 % | Break Down T | 300 % |

