

Technical Documentation

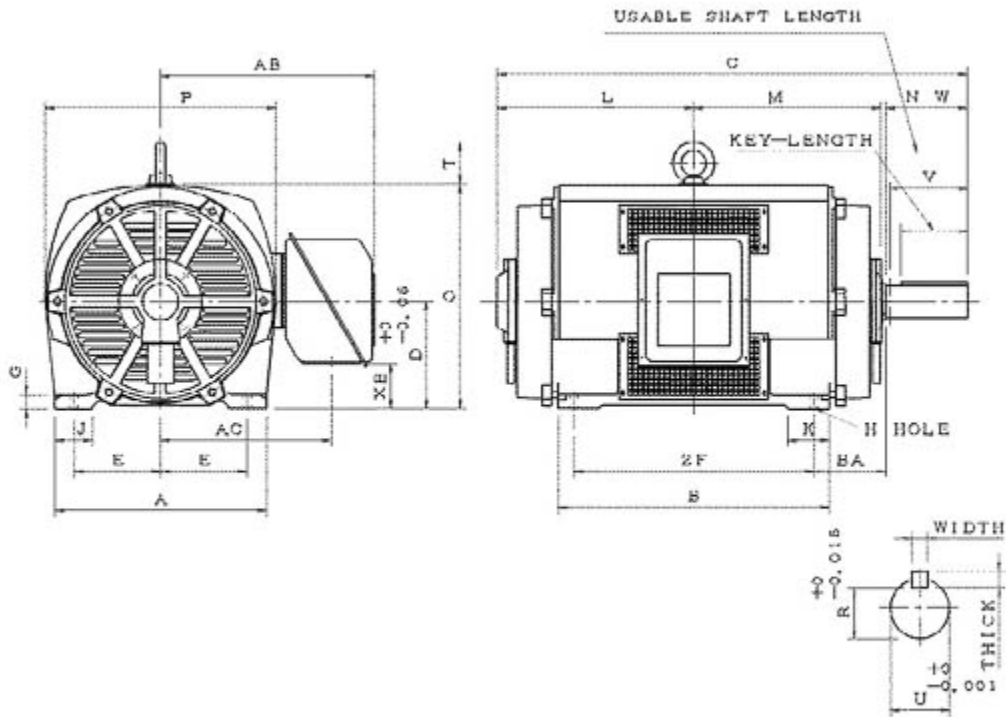
# **SDP35025**

## **Optim ODP | ASHH**

Date: December 1, 2016

**Dimensional Drawing**

|           |       |     |      |       |            |         |    |      |
|-----------|-------|-----|------|-------|------------|---------|----|------|
| Catalogue | Model | HP  | Pole | kW    | Rating     | Voltage | Hz | RPM  |
| SDP35025  | ASHH  | 350 | 2    | 261.1 | Continuous | 575 V   | 60 | 3600 |



ASHH-HMP-1 1 0

| Frame Size       | Mounting |      |          |         |                    | A           | B          | C     | CD              | D          |         |
|------------------|----------|------|----------|---------|--------------------|-------------|------------|-------|-----------------|------------|---------|
|                  | E        | 2F   | 2F2      | H       | BA                 |             |            |       |                 |            |         |
| 447TS            | 9        | 20   |          | 0.81    | 7.5                | 22.05       | 23.25      | 40.2  |                 | 11         |         |
| G                | J        | K    | L        | M       | O                  | P           | T          | Key   |                 |            | Keyseat |
| 1.4              | 3.95     | 4.35 | 17.95    | 17.15   | 23.15              | 24          | 4.35       | Width | Thick           | Length     | R       |
|                  |          |      |          |         |                    |             |            | 0.625 | 0.625           | 3.03       | 2.021   |
| Terminal Housing |          |      |          | Aux Box |                    | C/D Flange  |            |       |                 |            |         |
| AA               | AB       | AC   | XB       | AE      | AX                 | BB          | AH         | AK    | BD              | Aj         | BF      |
|                  | 22.25    | 17.7 | 4.65     |         |                    |             |            |       |                 |            |         |
| Shaft Extension  |          |      | Bearings |         | Approx. Weight Lbs | SPL dBA/3ft | Ins. Class | S.F.  | Drive Method    | Dimensions |         |
| N-W              | U        | V    | DE       | NDE     |                    |             |            |       |                 |            |         |
| 4.75             | 2.375    | 4.5  | 6315C3   | 6315C3  | 1590               | 90          | F          | 1.15  | Direct Coupling | Inches     |         |

### Technical Data Sheet

Motor Type: ASHH

Catalogue No: SDP35025

#### Nameplate Information

|           |            |                |             |             |              |                |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP        | Pole       | RPM            | Frame       | Voltage     | Hz           | Phase          |
| 350       | 2          | 3558           | 447TS       | 575         | 60           | 3              |
| Enclosure | Ins. Class | Service Factor | Time Rating | NEMA Design | Rated Amb.   | Rated Altitude |
| ODP       | 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.                        |                                 |                                      |                     |           |                                |
| 95.4              | 94.5                        | 94.5                            | 93.5                                 | 90.0                | 88.2      | 85.4                           |
| Torque            |                             |                                 |                                      | Current (A)         |           |                                |
| Full Load (lb-ft) | Locked Rotor (% FLT)        | Pull Up (% FLT)                 | Break Down (% FLT)                   | No Load             | Full Load | Locked Rotor                   |
| 516.00            | 100                         | 92                              | 200                                  | 82.4                | 305.6     | 2040                           |
| NEMA KVA Code     | Inertia (WR <sup>2</sup> )  |                                 |                                      | Safe Stall Time (s) |           | Noise Level Sound Press. dB(A) |
|                   | Rotor (lb-ft <sup>2</sup> ) | NEMA Load (lb-ft <sup>2</sup> ) | Max. Allowable (lb-ft <sup>2</sup> ) | Cold                | Hot       |                                |
| G                 | 33.000                      | 281                             | 281                                  | 19                  | 14        | 90                             |

#### VFD Duty Information

| Speed Range     |                 |                | VFD     |              | S.F.     |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type         |          |
| 20-60Hz         | 3-60Hz          | 60-120Hz       | ≤ 5 kHz | VPWM or CPWM | 1.0 Only |

#### Additional Information

| Bearings |        | Approx. Weight |
|----------|--------|----------------|
| DE       | NDE    | lbs            |
| 6315C3   | 6315C3 | 1590           |

#### Hazardous Locations Information

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

**Connection Diagram**

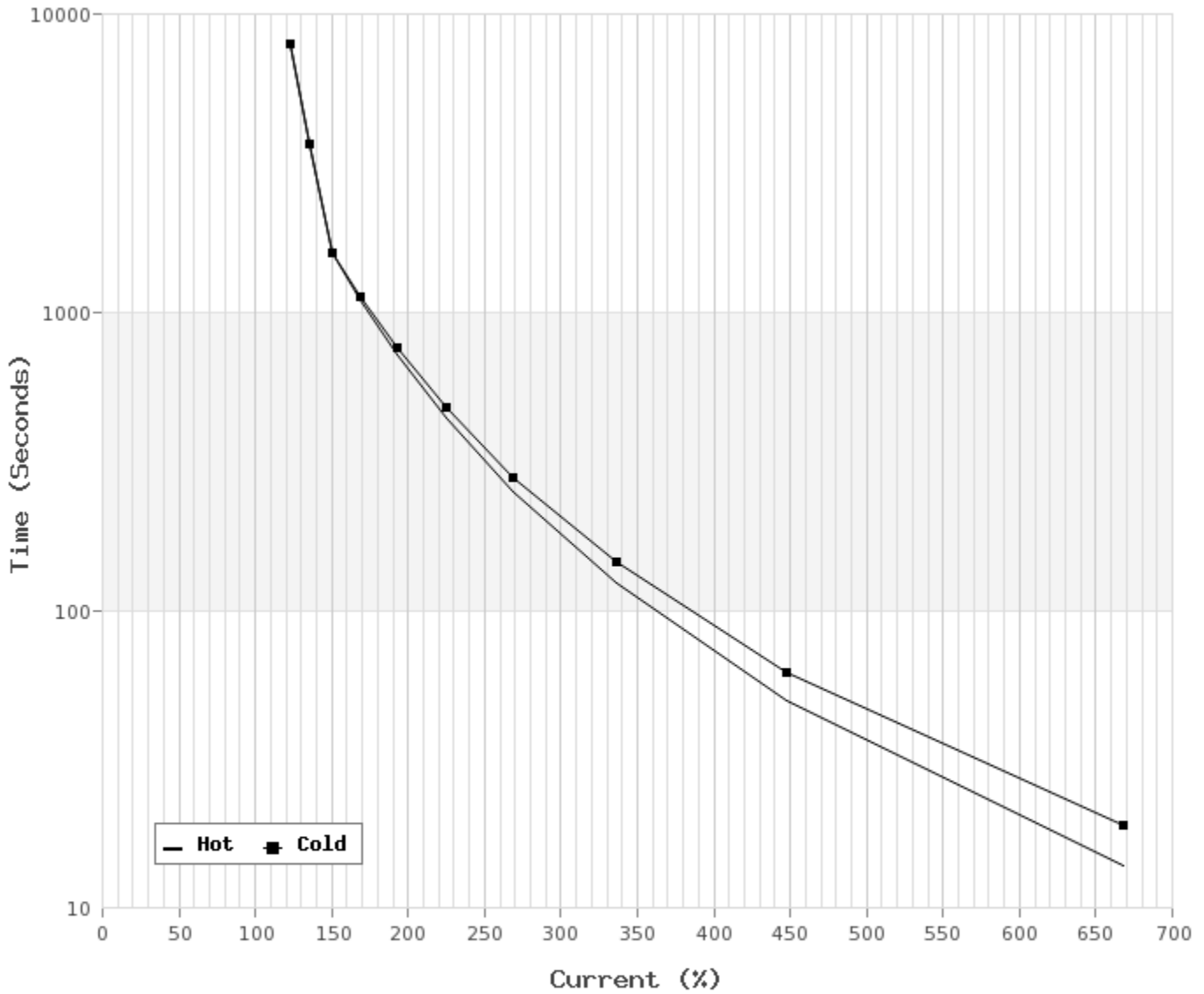


| 3 LEAD SINGLE VOLTAGE DELTA |       |    |    |    |  |
|-----------------------------|-------|----|----|----|--|
| VOLTAGE                     | CONN. | L1 | L2 | L3 |  |
| -                           | DELTA | 1  | 2  | 3  |  |

WD\_3D

**Thermal Limit Curves**

|                  |               |                        |      |                   |               |
|------------------|---------------|------------------------|------|-------------------|---------------|
| Motor Type: ASHH |               | Catalogue No: SDP35025 |      | Family: Optim ODP |               |
| HP               | 350           | Safe Stall Time        |      | Full Load A       | 0.0 / 305.6 A |
| Voltage          | 0 / 575V 60Hz | Hot                    | 14 s | Locked Rotor A    | 668 %         |
| RPM              | 3600          | Cold                   | 19 s | Locked Rotor A    | 0.0 / 2 A     |



**T-N and I-N Curves**

|                  |           |                        |              |                   |           |
|------------------|-----------|------------------------|--------------|-------------------|-----------|
| Motor Type: ASHH |           | Catalogue No: SDP35025 |              | Family: Optim ODP |           |
| HP               | 350       | Full Load T            | 516.00 lb-ft | Full Load A       | 305.6 A   |
| Voltage          | 575V 60Hz | Locked Rotor T         | 100 %        | Locked Rotor A    | 2,040.0 A |
| RPM              | 3600      | Pull Up T              | 92 %         | Break Down T      | 200 %     |

