

# BROOK CROMPTON

## TECHNICAL DATA SHEET

Three-phase asynchronous motor

MOTOR FRAME: **Cast Iron**

Motor type: **WP-UDF355MN IE3 4P 355kW**  
Motor item number:

|            |                       |           |       |            |           |       |
|------------|-----------------------|-----------|-------|------------|-----------|-------|
| 50 HZ data | Rated power:          | 355       | kW    | 60 HZ data | 410       | kW    |
|            | Poles(Synch speed):   | 4p (1500) | r.p.m |            | 4p (1800) | r.p.m |
|            | Full load speed:      | 1490      | r.p.m |            |           | r.p.m |
|            | Voltage:              | 400 / 690 | V     |            | 460       | V     |
|            | Frequency:            | 50        | Hz    |            | 60        | Hz    |
|            | Connection:           | Δ / Y     |       |            |           |       |
|            | Amps full load (FLA): | 600 / 348 | A     |            |           | A     |
|            | Amps no-load (NLA):   |           | A     |            |           | A     |

|                        |              |                      |                       |
|------------------------|--------------|----------------------|-----------------------|
| Enclosure:             | IP55         | Cable entries size:  | 2 x M63 + 1 x M20     |
| Mounting:              |              | Winding protection:  | 3xPTC160              |
| Insulation Class:      | F            | Max. Altitude:       | 1000 m.a.s.l.         |
| Max. ambient temp.:    | 40 °C        | Heater:              | no                    |
| Min. ambient temp.:    | -20 °C       | Shaft extension:     | 100x210 mm            |
| Max. temp. rise:       | 80 °C        | Weight:              | 2300 kg               |
| Duty type:             | S1           | Painting:            | Manufacturer standard |
| Cooling form:          | IC411 (TEFC) | Color:               | RAL 5021 Argus        |
| Bearing DE             | N324 C3      | Box position:        | Top DE                |
| Bearing NDE            | 6324 C3      | Cable entry towards: | Right                 |
| Grease:                | NSK EA6      | Cable type:          | ZYRAD500 35mm2        |
| Regreasing facilities: | YES          | Balance grade:       | Normal                |

|                   |                |                      |           |
|-------------------|----------------|----------------------|-----------|
| Efficiency class: | IE3            | Sound pressure (1m): | 79 dB(A)  |
| Load data:        | 100% 75% 50%   | Resistance R20:      | 0,0073 PH |
| Efficiency:       | 96 96,3 96,2   |                      |           |
| Power factor:     | 0,89 0,88 0,83 |                      |           |

|                         |           |                        |                       |
|-------------------------|-----------|------------------------|-----------------------|
| Full load torque (FLT): | 2276 Nm   | Pull out torque ratio: | 2,5 MK/MN             |
| Starting torque ratio:  | 2,2 MA/MN | Pull up torque:        | 1,7 MS/MN             |
| Starting current ratio: | 6,8 IA/IN | Rotor inertia WK2:     | 13,2 kgm <sup>2</sup> |

Special remarks:

### SPECIAL DATA FOR HAZARDOUS LOCATION MOTOR

|                           |                          |
|---------------------------|--------------------------|
| Hazardous classification: | Temp. Class:             |
| Certificate number:       | t <sub>E</sub> time: sek |

Special remarks: