



# Keeping Industry Turning

## Product Guide

**BROOK  
CROMPTON**  
*a WOLONG company*

20157E iss 3

# Contents

## 2

### Low Voltage - Safe area

|                              |   |
|------------------------------|---|
| Single phase .....           | 3 |
| W Aluminium.....             | 4 |
| W Cast iron.....             | 5 |
| Series 10 Aluminium .....    | 6 |
| Series 10 Cast iron.....     | 7 |
| Series 10 Single phase ..... | 8 |
| IP23 Drip proof.....         | 9 |

### Low Voltage - Hazardous area

|  |    |
|--|----|
| Zone 1 Ex db (eb) Flameproof .....         | 11 |
| MEPS Australian / New Zealand .....        | 12 |
| NEXP Premium Efficiency .....              | 13 |
| Zone 2 Ex nA Non Sparking .....            | 14 |
| Zone 21 / Zone 22 Dust ignition proof..... | 15 |

### High Voltage - Safe and hazardous area

|                               |    |
|-------------------------------|----|
| Safe Area - MV / HV.....      | 16 |
| Hazardous Area - MV / HV..... | 17 |

### GE Industrial Motors

|   |    |
|---|----|
| Ultra Series Vertical Pump Motors ..... | 18 |
|---|----|

### OLI Products

|                       |    |
|-----------------------|----|
| Vibrator motors ..... | 19 |
|-----------------------|----|

### Keeping Industry Turning

Brook Crompton, the original innovator in electric motor development, is a leading provider of energy efficient electric motors. With over 110 years' technical & design expertise, UK-based Brook Crompton delivers consistently reliable electric motors to a global market.

Trusted to power limitless industrial activities across diverse market sectors, the robust design of Brook Crompton's electric motors drives fans, pumps, compressors, conveyors and more, every second, of every day, of every year.

Driven by technology and innovation, Brook Crompton has one of the widest available ranges of electric motors for operation in hazardous atmospheres and hostile environments.

Renowned for their adaptability, Brook Crompton's extensive motor stock can be modified to suit the needs of different market sectors, with technical support from the company's knowledgeable team readily available to ensure the correct selection of motors for any application. For bespoke situations and complete flexibility, Brook Crompton will design and manufacture to meet individual customer specifications.

Brook Crompton has a long-standing reputation for efficient customer service, supporting customers worldwide through its global network. Specialist Brook Crompton Motor Centres operate alongside approved product distributors throughout the UK, mainland Europe, Middle East, Canada, USA, and Asia Pacific.

Shaping the future of electric motors, Brook Crompton, now part of the Wolong Electric Group, remains focused on the development of new products that improve energy efficiency, offer lower cost of ownership throughout the motor lifetime and reduce environmental impact.

**Brook Crompton, the original innovator in electric motors.**

# Aluminium / Rolled steel single phase

Capacitor start & run, Capacitor start - induction run  
Capacitor start - capacitor run

3

## Single Phase Aluminium Specification

| Specification                | Standard product                       | Option                          |
|------------------------------|--|---------------------------------|
| <b>Frame sizes</b>           | IEC / BS: 63 -100                      | -                               |
|                              | NEMA: 56                               | -                               |
| <b>Enclosure</b>             | IP55                                   | IP56, IP65, IP66                |
| <b>Mounting option</b>       | Foot (B3), Flange (B5), Face (B14)     | -                               |
|                              | Foot & Flange (B35), Foot & Face (B34) | -                               |
| <b>Terminal box position</b> | Top                                    | Right hand side, left hand side |
| <b>Voltage</b>               | Frame sizes 63-90: 230 ±10%            | -                               |
|                              | Frame size 100: 240 ±6%                | -                               |
|                              | NEMA 56: 110 / 220                     | -                               |
| <b>Frequency</b>             | 50 Hz / 60Hz                           | -                               |
| <b>Cooling</b>               | IC411                                  | IC410, IC416                    |
| <b>Insulation</b>            | class F                                | -                               |
| <b>Temperature rise</b>      | class B                                | -                               |

The above specification and options give a brief summary of features available for this range.

### Aluminium single phase range

The Brook Crompton aluminium single phase motor range is a high quality, high variant, high performance product with outputs from 0.07kW to 3kW in frame sizes DA63S to DA100L. Available as capacitor start & run, capacitor start - induction run or capacitor start - capacitor run.

The NEMA 56 single phase motor has a rolled steel construction with outputs from 0.5hp to 4hp.

Single phase motors are used primarily in small workshops and farms with a domestic supply. Some industrial equipment are specifically designed for use with a single phase electricity supply, such as fans, blowers, centrifugal pumps and high pressure washers

### Special build options:

- Brake / brake kit friendly (frames 63-100)
- Special shaft / special flange dimensions
- Special voltage
- Special paint
- Marine
- plus many more

### Multi-Mount

By simply changing the position of the feet, the user is able to obtain right, left or top mounted terminal box positions and by removing the standard endshield you can change it for a flange or face version.



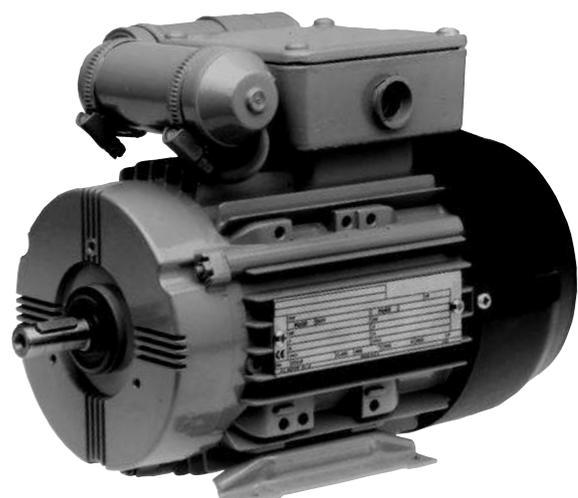
IEC / BS  
Frame sizes  
63 - 100



NEMA  
Frame size  
56

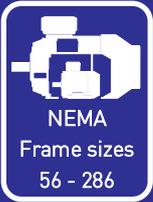


IP55, IP56,  
IP65 or IP66



# W Aluminium (IEC / NEMA)

## 4 Low voltage



### W Aluminium Specification

| Specification                | Standard product  | Option   |
|------------------------------|---|--|
| <b>Frame sizes</b>           | IEC / BS: 63 - 180<br>NEMA: 56 -286   | -  |
| <b>Enclosure</b>             | IP55  | IP56, IP65, IP66   |
| <b>Mounting option</b>       | Foot (B3), Flange (B5), Face (B14) or Pad (B30)<br>Foot & Flange (B35), Foot & Face (B34) | -  |
| <b>Terminal box position</b> | IEC / BS: Top.<br>NEMA: Left  | Right hand side, left hand side<br>Right hand side, Top                      |
| <b>Voltage</b>               | 3 kW and below: 230 / 400<br>4 kW and above: 400 / 690                                    | NEMA: 20hp and below: 230/460 or 575<br>NEMA: 25hp and above: 230/460 or 575 |
| <b>Frequency</b>             | 50 Hz / 60Hz  | variable frequency   |
| <b>Cooling</b>               | IC411   | IC410, IC416 & IC418   |
| <b>Insulation</b>            | class F   | class H  |
| <b>Temperature rise</b>      | class B   | class F  |

The above specification and options give a brief summary of features available for this range.

### W aluminium range

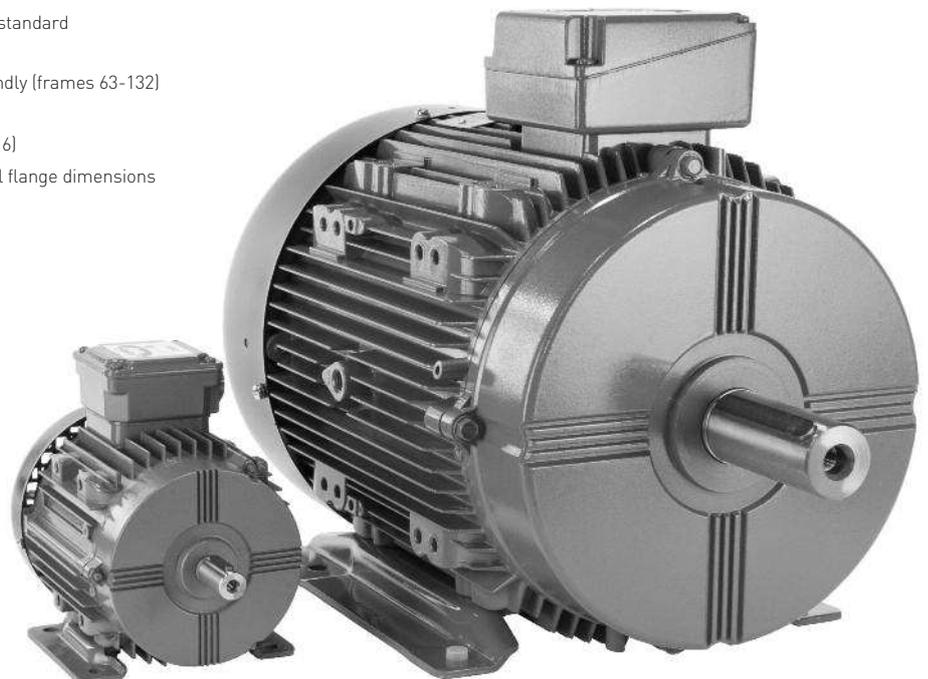
The Brook Crompton aluminium motor range is a high quality, high variant product with outputs from 0.07kW to 22kW in frame sizes WU-DA63S to WU-DA180L (56 to 286 NEMA). They are widely used in a diverse range of applications from food and drink to water and sewage. From heating and ventilation to refrigeration. Some of the benefits of aluminium over cast iron, include, high resistance to corrosion and atmospheric attack (except chlorine, salt-laden or sulphuric acid) and the fact that aluminium is approximately one third the weight of cast iron.

### Special build options:

- MEPS Australia / New Zealand
- 575 Volts - Canadian standard
- Multi speed
- Brake / brake kit friendly (frames 63-132)
- Encoder
- Force ventilated (IC416)
- Special shaft / special flange dimensions
- Special paint
- Special voltage
- Low starting torque
- Marine
- Hoist / crane duty
- plus many more

### Multi-Mount

By simply changing the position of the feet, the user is able to obtain right, left or top mounted terminal box positions and by removing the standard endshield you can change it for a flange or face version.



# W Cast iron (IEC / BS, NEMA)

Low voltage

5

## W Cast Iron Specification

| Specification                | Standard product                                | Option                               |
|------------------------------|---|--------------------------------------|
| <b>Frame sizes</b>           | IEC / BS: 80 - 355                              | -                                    |
|                              | NEMA: 56 - 587                                  | -                                    |
| <b>Enclosure</b>             | IP55  | IP56, IP65, IP66                     |
| <b>Mounting option</b>       | Foot (B3), Flange (B5), Face (B14) or Pad (B30) | -                                    |
|                              | Foot & Flange (B35), Foot & Face (B34)          | -                                    |
| <b>Terminal box position</b> | IEC / BS: Top.                                  | Right hand side, left hand side      |
|                              | NEMA: Left hand side                            | Right hand side, Top                 |
| <b>Voltage</b>               | 3 kW and below: 230 / 400                       | NEMA: 20hp and below: 230/460 or 575 |
|                              | 4 kW and above: 400 / 690                       | NEMA: 25hp and above: 230/460 or 575 |
| <b>Frequency</b>             | 50 Hz / 60Hz                                    | variable frequency                   |
| <b>Cooling</b>               | IC411   | IC410, IC416 & IC418                 |
| <b>Insulation</b>            | class F   | class H                              |
| <b>Temperature rise</b>      | class B   | class F                              |

The above specification and options give a brief summary of features available for this range.

## W cast iron range

The Brook Crompton W cast iron motor range is a high quality, high variant product with outputs from 0.18kW to 400kW in frame sizes 80 to 355L (56 to 587 NEMA).

They are suitable for use within a diverse range of applications from food and drink to china clay production. From roller table drives to refrigeration. Many applications often have adverse operating conditions including repeated starting and occasional overloading; the 'W' range is well suited to these situations. A virtual 'go anywhere' motor, this cast iron range has a full 3-year guarantee.

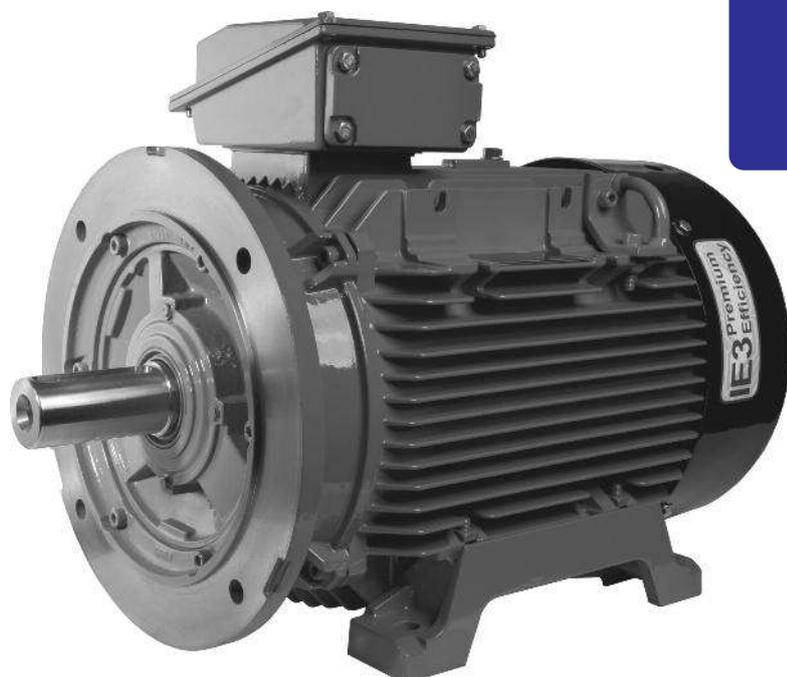
## Special build options:

- MEPS Australia / New Zealand
- 575 Volts - Canadian standard
- Multi speed
- Encoder
- Force ventilated (IC416)
- Special shaft / special flange dimensions
- Special paint
- Special voltage
- Roller bearing
- Low starting torque
- Marine
- Hoist / crane duty
- Fumex (smoke extraction)
- plus many more

## Multi-Mount

By simply changing the position of the feet, the user is able to obtain right, left or top mounted terminal box positions and by removing the standard endshield you can change it for a flange or face version.

On frame sizes 200 to 355 a flange ring can be fitted to give (B5) or (B35) mounting options, without removing the drive end endshield.



IEC / BS  
Frame sizes  
80 - 355



NEMA  
Frame sizes  
56 - 587



IE2, IE3 or IE4  
Efficiency



UL Verified



IP55, IP56,  
IP65 or IP66

# Series 10 Aluminium (IEC)

6 Low voltage



## Series 10 Aluminium Specification

| Specification         | Standard product   | Option             |
|-----------------------|--|--------------------|
| Frame material        | 56 - 160 aluminium   | -                  |
| Enclosure             | IP55   | IP56, IP65, IP66   |
| Mounting option       | Foot (B3), Flange (B5), Face (B14)<br>Foot & Flange (B35), Foot & Face (B34) | -                  |
| Terminal box position | Top  | Left, Right        |
| Voltage               | 3 kW and below: 230 / 400<br>4 kW and above: 400 / 690                       | -                  |
| Frequency             | 50 Hz / 60Hz   | variable frequency |
| Cooling               | IC411  | -                  |
| Insulation            | class F  | -                  |
| Temperature rise      | class B  | -                  |

The above specification and options give a brief summary of features available for this range.

### Series 10 aluminium range

The Brook Crompton Series 10 aluminium range is a high quality standard range of electric motors with a specification suitable for most industrial applications.

It covers outputs from 0.06kW up to 18.5kW in frame sizes 56 to 160.

### Stock modifications include

- B14, B34, B35 mounting options
- IP56, IP65 ingress protection
- Change of terminal box position
- Cable entry position change
- Anti condensation heaters
- Restamp for inverter rating

### Multi-Mount

By simply changing the position of the feet, the user is able to obtain right, left or top mounted terminal box positions and by removing the standard endshield you can change it for a flange or face version.



# Series 10 Cast iron (IEC)

Low voltage

7

## Series 10 Cast Iron Specification

| Specification         | Standard product                       | Option             |
|-----------------------|--|--------------------|
| Frame material        | 80 - 450 cast iron                     | -                  |
| Enclosure             | IP55                                   | IP56, IP65, IP66   |
| Mounting option       | Foot (B3), Flange (B5), Face (B14)     | -                  |
|                       | Foot & Flange (B35), Foot & Face (B34) | -                  |
| Terminal box position | Top                                    | -                  |
| Voltage               | 3 kW and below: 230 / 400              | -                  |
|                       | 4 kW and above: 400 / 690              | -                  |
| Frequency             | 50 Hz / 60Hz                           | variable frequency |
| Cooling               | IC411                                  | -                  |
| Insulation            | class F                                | -                  |
| Temperature rise      | class B                                | -                  |

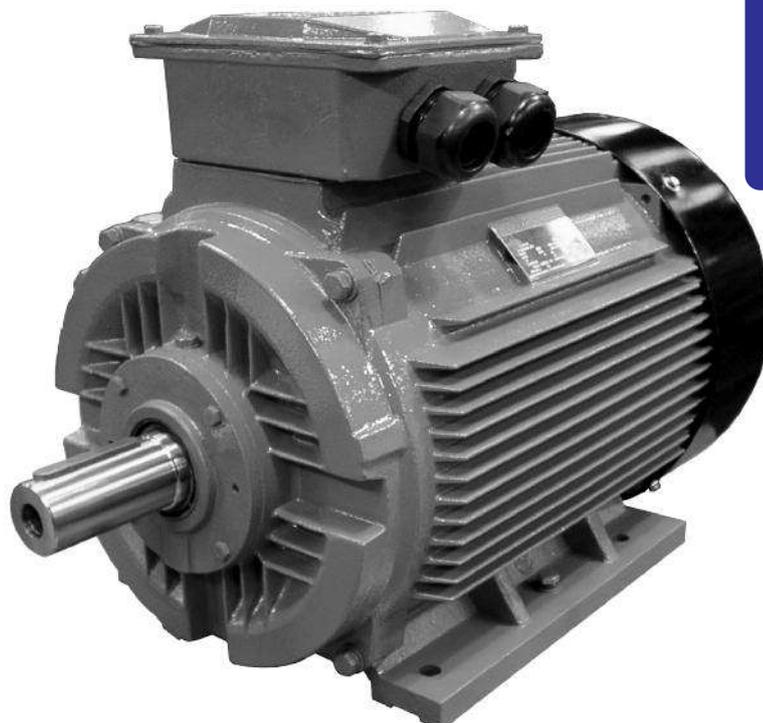
The above specification and options give a brief summary of features available for this range.

## Series 10 cast iron range

The Brook Crompton Series 10 cast iron range is a high quality standard range of electric motors with a specification suitable for most industrial applications. It covers outputs from 0.09kW up to 900kW in frame sizes 80 to 450. MEPS Australia / New Zealand available on request.

## Stock modifications include

- B14, B34, B35 mounting options
- IP56, IP65 ingress protection
- Cable entry position change
- Anti condensation heaters
- Restamp for inverter rating



# Series 10 - Single phase

8

Capacitor start / Capacitor run



## Series 10 Aluminium Single Phase Specification

| Specification         | Standard product   | Option |
|-----------------------|--|--------|
| Frame material        | 71 - 100 aluminium   | -      |
| Enclosure             | IP55   | -      |
| Mounting option       | Foot (B3), Flange (B5), Face (B14)<br>Foot & Flange (B35), Foot & Face (B34) | -      |
| Terminal box position | Top  | -      |
| Voltage               | 3 kW and below: 230  | -      |
| Frequency             | 50 Hz  | -      |
| Cooling               | IC411  | -      |
| Insulation            | class F  | -      |
| Temperature rise      | class B  | -      |

The above specification and options give a brief summary of features available for this range.

## Series 10 Single phase range

The Brook Crompton Series 10 single-phase range is an aluminium, high quality standard range of electric motors.

It covers outputs from 0.25kW up to 3.0kW in frame sizes 71 to 100. Available as capacitor start & capacitor run.

## Stock modifications include

- B14, B34, B35 mounting options
- Thermistors
- Anti condensation heaters



# IP23 - Drip Proof

Low voltage

## IP23 Drip Proof Cast Iron Specification

| Specification             | Standard product | Option              |
|---------------------------|------------------|---------------------|
| Frame material            | Cast Iron        | -                   |
| Enclosure                 | IP23             | -                   |
| Mounting option           | Foot (B3)        | Foot & Flange (B35) |
| Terminal box position     | Top or Right     | -                   |
| Voltage                   | 400 / 690        | -                   |
| Frequency                 | 50 Hz / 60Hz     | Variable frequency  |
| Cooling                   | IC01             | -                   |
| Insulation                | class F          | -                   |
| Temperature rise          | class B          | -                   |
| Thermal protection        | standard         | -                   |
| Anti-condensation heaters | -                | 110V or 240V        |

The above specification and options give a brief summary of features available for this range.

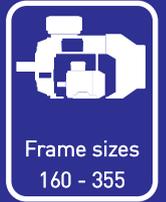
### IP23 cast iron range

The Brook Crompton IP23 cast iron range is a high quality standard range of electric motors with a specification suitable for most industrial applications.

It covers outputs from 18.5kW up to 710kW in frame sizes 160 to 355.

### Stock modifications include

- B35 mounting
- Roller bearing
- Anti condensation heaters
- Restamp for inverter rating
- Insulated bearing



- Gas or dust protection.
- Zone 1 Ex db (eb).
- Zone 2 Ex nA non sparking.
- IIB or IIC enclosure classes.
- Outputs from 0.18kW to 800kW.
- Increased outputs.
- IE2, IE3 or IE4 efficiency.
- Premium efficiency.
- Brake motors.
- Variable speed drive compliant.
- Fume Extraction.
- Group I mining
- Certified to: ATEX, PTB, IECEx, CSA, UL, NEPSI, TestSafe, TR CU.

# W Ex db (eb) flameproof (IEC / BS, NEMA)

Low voltage - Zone 1, ATEX, IECEx, Class 1

## Flameproof Specification

| Specification                | Standard product   | Option   |
|------------------------------|--|--|
| <b>Frame sizes</b>           | IEC / BS: 63 - 450<br>NEMA: 143-505                          | -  |
| <b>Enclosure</b>             | IP55   | IP56, IP65, IP66, IP67* or IP68*                       |
| <b>Mounting option</b>       | Foot (B3), Flange (B5), Face (B14) or Pad (B30)              | -  |
|                              | Foot & Flange (B35), Foot & Face (B34)                       | -  |
| <b>Terminal box position</b> | 90 - 180: Right hand side<br>200 - 315: Top                  | Left hand side, top<br>Right hand side, left hand side |
| <b>Voltage</b>               | 3 kW and below: 220-240 / 380-415<br>4 kW and above: 380-415 | -  |
| <b>Frequency</b>             | 50 Hz / 60Hz   | variable frequency                                     |
| <b>Cooling</b>               | IC411  | IC410 & IC418  |
| <b>Insulation</b>            | class F  | class H  |
| <b>Temperature rise</b>      | class B  | class F  |

The above specification and options give a brief summary of features available for this range.  
\* IP67 & 68 only available on frame sizes 90 to 180

### W flameproof range

Brook Crompton's flameproof motors are designated Ex db flameproof and are designed for operation in Zone 1 hazardous areas. They comply with all relevant national and international standards. They are of a rugged cast iron construction to withstand an internal explosion.

Outputs range from 0.37kW to 200kW with smaller or larger outputs on request.

Standard motors are suitable for applications classified T4, in addition, T5 and T6 can be supplied, although this may involve reduced outputs

### Special build options:

- Ex db eb IIB or IIC
- Group I mining
- Special shaft dimensions
- Special voltage
- Low starting torque
- Offshore
- Roller bearing
- 575 Volts - Canadian standard
- plus many more

### Multi-Mount (200 frames and above)

By simply changing the position of the feet, the user is able to obtain right, left or top mounted terminal box positions. A flange ring can also be fitted to give (B5) or (B35) mounting options, without removing the drive end endshield.



# MEPS Australian / New Zealand flameproof (IEC)

12

Low voltage - Zone 1 IECEx



## MEPS Flameproof Specification

| Specification         | Standard product                                | Option             |
|-----------------------|---|--------------------|
| Frame sizes           | IEC: 90 - 560                                   | -                  |
| Enclosure             | IP55  | IP56, IP65, IP66   |
| Mounting option       | Foot (B3), Flange (B5), Face (B14) or Pad (B30) | -                  |
|                       | Foot & Flange (B35), Foot & Face (B34)          | -                  |
| Terminal box position | Top   | on request         |
| Voltage               | 3 kW and below: 220-240 / 380-415               | -                  |
|                       | 4 kW and above: 380-415                         | -                  |
| Frequency             | 50 Hz / 60Hz                                    | variable frequency |
| Cooling               | IC411   | -                  |
| Insulation            | class F   | class H            |
| Temperature rise      | class B   | class F            |

The above specification and options give a brief summary of features available for this range.

## MEPS Australian / New Zealand Flameproof range

Brook Crompton's range of flameproof motors for Australia and New Zealand are designated Ex d flameproof and are designed for operation in Zone 1 hazardous areas.

They comply with all relevant national and international standards. They are of a rugged cast iron construction to withstand an internal explosion.

Outputs range from 0.37kW to 1000kW with smaller or larger outputs on request.

Standard motors are suitable for applications classified T3 and T4 can be supplied.

## Special build options:

- ATEX, IECEx
- Gas groups IIB or IIC
- Group I mining
- Special shaft dimensions
- Special voltage
- Low starting torque
- Offshore
- Roller bearing
- plus many more



# NEXP Premium efficiency range

Low voltage - Class I Division 1

13

## NEMA Explosion Specification

| Specification         | Standard product   | Option             |
|-----------------------|--|--------------------|
| Frame sizes           | 143 - 449  | -                  |
| Enclosure             | IP55   | IP56, IP65, IP66   |
| Mounting option       | Foot (B3), Flange (B5), Face (B14)<br>Foot & Flange (B35), Foot & Face (B34) | -                  |
| Terminal box position | Left   | right              |
| Voltage               | 3 kW and below: 230 / 460<br>4 kW and above: 460                             | 575V               |
| Frequency             | 60Hz / 50Hz  | variable frequency |
| Cooling               | IC411  | IC410, IC418       |
| Insulation            | class F  | class H            |
| Temperature rise      | class B  | class F            |

The above specification and options give a brief summary of features available for this range.

## NEXP Premium Efficiency explosion proof range

Brook Compton's NEMA frame Explosion proof range of motors is designed for operation in areas classified Class 1 Division 1 according to NEC code 500 with certification by UL and CSA.

They comply with the DoE / NR Canada Premium Efficiency regulations and are constructed from cast iron, including fan cover for operation in harsh environments.

Outputs range from 1 Hp to 400 Hp with larger outputs on request.

On request NEMA frame explosion proof motors can be built to customer specific requirements for industries such as oil and gas, petrochemical and mining.

NEMA Frame explosion proof motors are also available in EPACT and non-classified efficiency designs.

## Special build options:

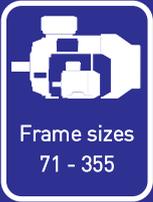
- Special shaft dimensions
- Special voltage
- Low starting torque
- Offshore
- Roller bearing
- plus many more



# W Ex nA (IEC & BS)

14

Low voltage - Zone 2 , T3. Class 1 Div 2 (CSA)



Frame sizes  
71 - 355



IE2 or IE3  
Efficiency



IP55, IP56,  
IP65 or IP66

## Ex nA Specification

| Specification         | Standard product  | Option                          |
|-----------------------|---|---------------------------------|
| Frame sizes           | 71 - 355  | -                               |
| Enclosure             | IP55  | IP56, IP65, IP66                |
| Mounting option       | Foot (B3), Flange (B5), Face (B14) or Pad (B30)<br>Foot & Flange (B35), Foot & Face (B34) | -                               |
| Terminal box position | Top   | Right hand side, left hand side |
| Voltage               | 3 kW and below: 230 / 400<br>4 kW and above: 400 / 690                                    | -                               |
| Frequency             | 50 Hz / 60Hz  | -                               |
| Cooling               | IC411   | -                               |
| Insulation            | class F   | class H                         |
| Temperature rise      | class B   | class F                         |

The above specification and options give a brief summary of features available for this range.

## W Ex nA range

The construction of Ex nA motors is similar to standard TEFV motors but with special attention made to eliminate the production of arcs, sparks or dangerous surface temperatures. Air gap concentricity is rigidly inspected throughout manufacture.

The structure of the motor is also impact tested. All motors comply with the requirements of the relevant ATEX directive, CSA (Class 1, Div 2). IECEx.

## Special build options:

- Multi speed
- Special shaft / special flange dimensions
- Special paint
- Special voltage
- Low starting torque
- Roller bearing
- plus many more

## Multi-Mount

By simply changing the position of the feet, the user is able to obtain right, left or top mounted terminal box positions and by removing the standard endshield you can change it for a flange or face version.

On frame sizes 200 to 355 a flange ring can be fitted to give (B5) or (B35) mounting options, without removing the drive end endshield.



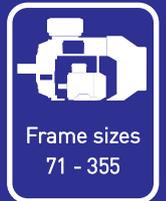
# W Dust ignition proof (IEC & BS)

Low voltage - Zone 21 or Zone 22

## Dust ignition proof Specification

| Specification         | Standard product                                | Option                          |
|-----------------------|---|---------------------------------|
| Frame sizes           | 71 - 355  | -                               |
| Enclosure             | IP55  | -                               |
| Mounting option       | Foot (B3), Flange (B5), Face (B14) or Pad (B30) | IP56, IP65, IP66                |
|                       | Foot & Flange (B35), Foot & Face (B34)          | -                               |
| Terminal box position | Top, (80 frame right hand side)                 | Right hand side, left hand side |
| Voltage               | 3 kW and below: 230 / 400                       | -                               |
|                       | 4 kW and above: 400 / 690                       | -                               |
| Frequency             | 50 Hz / 60Hz                                    | -                               |
| Cooling               | IC411   | -                               |
| Insulation            | class F   | class H                         |
| Temperature rise      | class B   | class F                         |

The above specification and options give a brief summary of features available for this range.



### W Dust Ignition Proof range

The construction of Dust Ignition Proof motors is similar to standard TEFV motors but with special attention made to eliminate the production of arcs, sparks or dangerous surface temperatures. Air gap concentricity is rigidly inspected throughout manufacture. The structure of the motor is also impacted tested. All motors comply with the requirements of the relevant ATEX directive.

### Special build options:

- Multi speed
- Special shaft / special flange dimensions
- Special paint
- Special voltage
- Low starting torque
- Roller bearing
- plus many more

### Multi-Mount

By simply changing the position of the feet, the user is able to obtain right, left or top mounted terminal box positions and by removing the standard endshield you can change it for a flange or face version. On frame sizes 200 to 355 a flange ring can be fitted to give (B5) or (B35) mounting options, without removing the drive end endshield.





### Safe Area High Voltage Specification

| Specification         | Standard product   | Option             |
|-----------------------|--|--------------------|
| Frame sizes           | IEC: 355 - 800   | -                  |
|                       | NEMA & ANEMA on request                                  | -                  |
| Enclosure             | IP55   | IP56, IP65, IP66   |
| Mounting option       | Foot (B3), Flange (B5), Foot & Flange (B35)              | -                  |
|                       | Flange (V1)  | -                  |
| Terminal box position | Top  | on request         |
| Voltage               | 2.3kV to 13.8kV  | -                  |
| Frequency             | 50 Hz / 60Hz   | variable frequency |
| Cooling               | IC01, IC02, IC410, IC411, IC416, IC511,<br>IC611 & IC81W | others on request  |
| Insulation            | class F  | class H            |
| Temperature rise      | class B  | class F            |

The above specification and options give a brief summary of features available for this range.

### MV / HV motors safe area

Brook Crompton's range of medium and high voltage motors are available in cast-iron and fabricated steel frames, with die cast aluminium and copper bar rotors to suit the requirements of a wide range of applications including pumps, fans, compressors and power transmission.

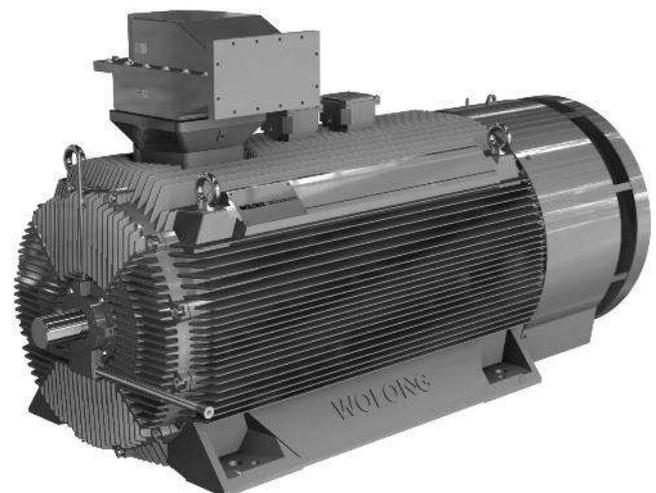
They comply with all relevant national and international standards and are available in outputs from 90 kW to 130 MW in induction and synchronous designs.

Special build motors customised to customer specific requirements can be engineered as required.

Motors are available with low noise water cooled designs, air to air heat exchangers, enclosures to NEMA WP1 and WP2, low starting current, with designs available suitable for high inertia fans, reciprocating piston and turbo compressors.

### Special build options:

- Special shaft dimensions
- Special voltage
- Low starting torque
- Offshore
- Roller bearing
- plus many more



# Hazardous area

## High Voltage

### Hazardous Area High Voltage Specification

| Specification         | Standard product                            | Option             |
|-----------------------|---|--------------------|
| Frame sizes           | IEC: 355 - 800                              | -                  |
| Enclosure             | NEMA & ANEMA on request                     | -                  |
| Mounting option       | IP55  | IP56, IP65, IP66   |
|                       | Foot (B3), Flange (B5), Foot & Flange (B35) | -                  |
|                       | Flange (V1)                                 | -                  |
| Terminal box position | Top   | on request         |
| Voltage               | 2.3kV to 13.8kV                             | -                  |
|                       | 50 Hz / 60Hz                                | variable frequency |
| Frequency             | IC01, IC02, IC410, IC411, IC416, IC511,     | others on request  |
| Cooling               | IC611 & IC81W                               |                    |
| Insulation            | class F                                     | class H            |
| Temperature rise      | class B                                     | class F            |

The above specification and options give a brief summary of features available for this range.

### MV / HV Explosion proof designs

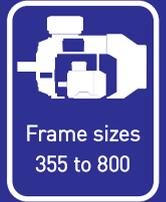
Brook Crompton offer a wide range of medium and high voltage motors with explosion proof enclosures are available to suit a wide range of customer requirements.

Offering explosion protection to ATEX, IECEx and NEC standards in ExN, Exd, ExP, and Class 1, Div 1. We are able to meet the requirements of a wide range of industrial applications for onshore and offshore sites

Motors are available with low noise water cooled designs, air to air heat exchangers, low starting current, with designs available suitable for high inertia fans, reciprocating piston and turbo compressors.

### Special build options:

- Special shaft dimensions
- Special voltage
- Low starting torque
- Offshore
- Roller bearing
- plus many more



# Ultra series vertical pump motors

18

Solid shaft and hollow shaft designs



GE INDUSTRIAL MOTORS  
a WOLONG company



## Vertical Pump Motor specification

| Specification     |                            |
|-------------------|----------------------------|
| Frame Sizes       | 320 - 449 NEMA             |
| Voltage           | 230 / 460, 460 PWS and 575 |
| Frequency         | 60 or 50 Hz                |
| Power             | 3 - 1000HP                 |
| Poles             | 2 - 8 (449 frame up to 12) |
| Thrust Capacity   | Normal and High            |
| Shaft application | Hollow and Solid           |
| Motor design      | Induction                  |
| Enclosure         | TEFC and WPI               |

The above specification and options give a brief summary of features available for this range.

### Customer Value: Maximising operational efficiency.

#### Opex Savings

- Rugged construction and robustly engineered protection means longer MTTF, less replacements, less part stock and less unplanned downtime.

#### Space

- Increased HP/kW per frame size means less weight and less footprint opportunities for application requirements.
- New design conforms to standard industry CD dimensions for easy installation and replacement

#### Safety and Environment

- Complies with API 610 12<sup>th</sup> Edition
- CSA Division 2, Zone 2 approval
- NOM certification
- UL Fire Pump approval

### Features:

- All frames fully inverter duty capable
- NEMA Premium Efficient - All frames
- Low temperature rise, Class H insulation
- Precision RCF data (+/-5%)
- Improved axial ball ratchet systems for better equipment protection
- Effective WPI rodent protection
- Rugged and reliable cast iron construction
- Thrust capacity 20% above industry standard for deep well applications
- No water cooling required
- Expanded 449 frame MV capability
- SRC couplings available on stock motors
- Insulated bearing and AEGIS SGR standard
- Extended bearing life able to meet 100,000 hour (~12 year) requirement
- Standard WPI available in 575V rating
- 3 Year Warranty



# Vibrator motors

## OLI - MVE Range



WHEN YOU NEED IT, WHERE YOU NEED IT.  
THE WORLDWIDE LEADER IN VIBRATION TECHNOLOGY

19

### MVE Standard

Efficient solution, in stock

Conveying, screening, feeding, hopper emptying.  
Food, construction, mining, foundry.  
From 0.03 to 16.5kW (2-4-6-8 poles), 1Ph and 3Ph

- II3D Ex tD A22 Tx IP66 - II2D Ex t IIIC Tx Db IP66
- Ex tb IIIC Tx Db IP66
- Class II Div2 Group F,G T4 NEMA4



### MVE-E Increased Safety

Safety in hazardous environments

Screening, feeding, hopper emptying.  
Food, mining, chemical.  
From 0.16 to 7.60kW (2-4-6-8 poles).

- II2GD - Exe IIT3 Ex tD A21 T 150°C IP66
- Ex tb IIIC Tx Db IP66



### MVE-D Explosion Proof

Safety in extremely hazardous environments

Screening, conveying, feeding.  
Oil and gas sector, mining.  
From 0.35 to 3.6kW (2-4-6-8 poles).

- II2GD Ex d IIB T4 Ex tD A21 IP66 T135°C
- Ex db IIB T4- Ex tb IIIC T135°C
- Class I Div1 Group C,D T4, IP66
- Class II Div1 Group E,F,G
- NCC IEC 60079

### MVE-MICRO

Seal-proof monolithic body frame

Hopper emptying, compaction.  
Food, plastic, chemical.  
From 0.03 to 0.07kW (2 poles), 1Ph and 3Ph

- II3D Ex tD A22 Tx IP66 - II2D Ex t IIIC Tx Db IP66
- Ex tb IIIC Tx Db IP66
- Class II Div2 Group F,G T4 NEMA4



### MVE-DC Direct Current

IP 66 protection, resistant to accidental shocks

Concrete pumps.  
12V and 24V, from 0.08 to 0.16kW.

- II3D Ex tD A22 Tx IP66



## UK, EUROPE & MIDDLE EAST

Brook Crompton UK Ltd  
St. Thomas' Road  
Huddersfield,  
HD1 3LJ

Tel: +44 (0)1484 557200  
Fax: +44 (0)1484 557201  
email: [csc@brookcrompton.com](mailto:csc@brookcrompton.com)

[www.brookcrompton.com](http://www.brookcrompton.com)

## ASIA PACIFIC

Brook Crompton Asia Pacific Pte Ltd  
19 Keppel Road #08-01  
Jit Poh Building  
Singapore 089058

Tel: +65 6227 0308  
Fax: +65 6227 0605  
email: [marketing@brookcrompton-ap.com](mailto:marketing@brookcrompton-ap.com)

[www.brookcrompton.com](http://www.brookcrompton.com)

## NORTH AMERICA

Americas and Canadian Main Sales Office & Warehouse  
Brook Crompton Ltd  
264 Attwell Drive  
Toronto, Ontario  
M9W 5B2

US Main Warehouse  
Brook Crompton USA Inc  
1100 E. 222<sup>nd</sup> Street  
Euclid, OH  
44117

Quebec Sales office and Distribution Warehouse  
Brook Crompton Ltd  
5088 Francois Cusson Street  
Lachine, Quebec  
H8T 1B3

Call : 1-800-MOTORS-9 (press 1 for sales)  
(1-800-668-6779) OR 1-800-463-8917 (press 1 for sales)  
Locally in Toronto call 416-675-3844 (press 1 for sales)  
Locally in Quebec 1-888-668-9843  
email: [sales@brookcromptonna.com](mailto:sales@brookcromptonna.com)

[www.brookcrompton.com](http://www.brookcrompton.com)

Every care has been taken to ensure the accuracy of the information contained in this publication, but, due to a policy of continuous development and improvement the right is reserved to supply products which may differ slightly from those illustrated and described in this publication