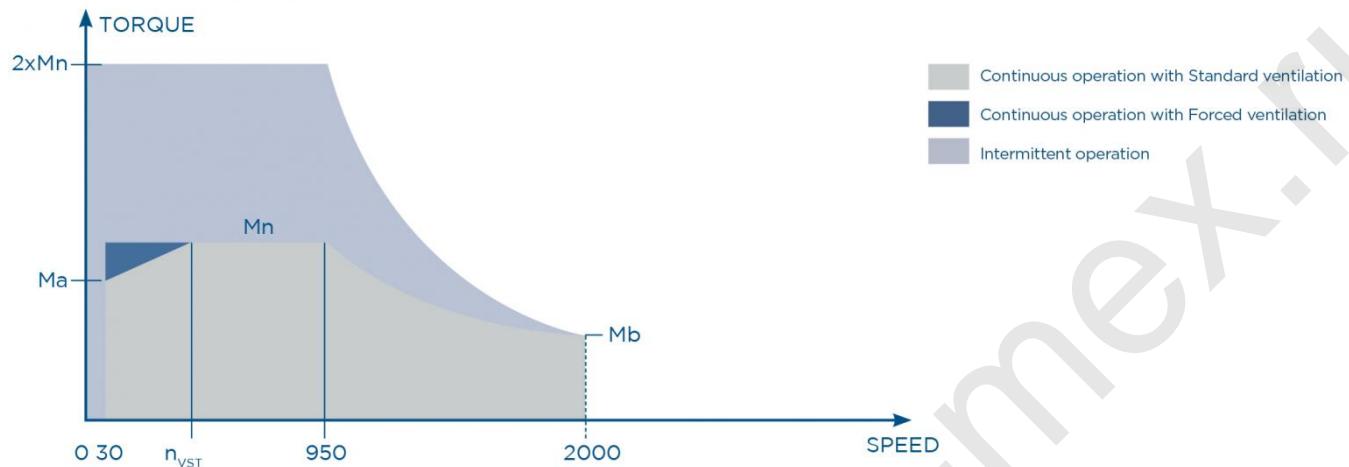


| | | |
|-------------------------------------|---|---|
| Power supply | 1ph230V | 3ph400V |
| Power range | 0.25 - 1.5 kW | 0.25 - 5.5 kW |
| Motor sizes | 71-80-90 | 71-80-90-100-112-132 |
| Inverter sizes | S | S-M |
| Constant torque speed ranges | 50÷950 50÷1450 | 50÷950 50÷1450 50÷1650 50÷2450 |
| Speed range | 0 ÷ 3000 rpm | |
| Frequency range | 0 ÷ 150 Hz | |
| Frequency resolution | 0.01 Hz | |
| Motor control | Sensorless vectorial, V/f scalar | |
| Motor starting torque | 200% of the rated torque | |
| 100% torque step response | 150ms | |
| Current overload | 150% / 60s ; 200% / 3s | |
| Frequency reference | Integrated potentiometer, analogue input, binary fixed frequency, pulse train, fieldbus, digital Up/Down, keyboard, IP66 potentiometer, multi source (sum) | |
| Direction selection | Digital inputs, keyboard, fieldbus, IP66 switch (optional) | |
| Analogue inputs | 1 x (-10÷10V) / (0-20mA) | |
| Digital inputs | 4 multifunction (+1 optional) | |
| Thermal probe inputs | 1 x bimetallic (+1 x PTC/PT100 optional) | |
| Built-in potentiometer | 1 with Start/Stop function (+1 optional IP66) | |
| Encoder input | 1 incremental Line Driver (speed loop) | |
| Analogue outputs | 1 x (0-10V) multifunction (optional) | |
| Digital Outputs | 1 multifunction (optional) | |
| Relay outputs | 1 multifunction (+1 optional) | |
| Serial interfaces | USB | |
| Integrated field BUS | CANopen 402, Modbus RTU | |
| Optional field buses | Profibus DPV1, Ethercat, Ethernet-IP, Profinet | |
| Optional expansion modules | I/O expansion; EM brake control; Dynamic braking chopper; External IP66 Potentiometer and Direction Selector | |
| Integrated safety | Safe Torque Off, short circuit, temperature | |
| On-board power supplies | 1x10V, 1x24VDC | |
| Other Functions | <ul style="list-style-type: none"> ● Parametric V/f curve (V/f control mode) ● Parametric S ramps ● PI process controller ● Jog function ● Electronic torque limiter ● DC-bus accessible ● Integrated multiple dynamic braking ● Parameter Copy Keyboard ● I/O Expansions (optional) ● Braking chopper and resistor (optional) ● Synchronised electromechanical brake control (optional) ● Configuration software via PC with integrated digital oscilloscope | |
| Other options | Emergency stop button, quick Power and Signal connectors | |
| Protection rating | IP55-56-66 | |

9.2 PERFORMANCES

9.2.1 Version DV123

Rated operating speed G1



P_n = motor shaft nominal power

M_n = continuous nominal torque

M_a = continuous torque at minimum speed

M_b = continuous torque at maximum speed

n_n = rated speed

n_{min} = minimum speed

n_{max} = maximum speed

n_{VST} = forced ventilation speed threshold

IC411 = STANDARD ventilation

IC416 = FORCED ventilation

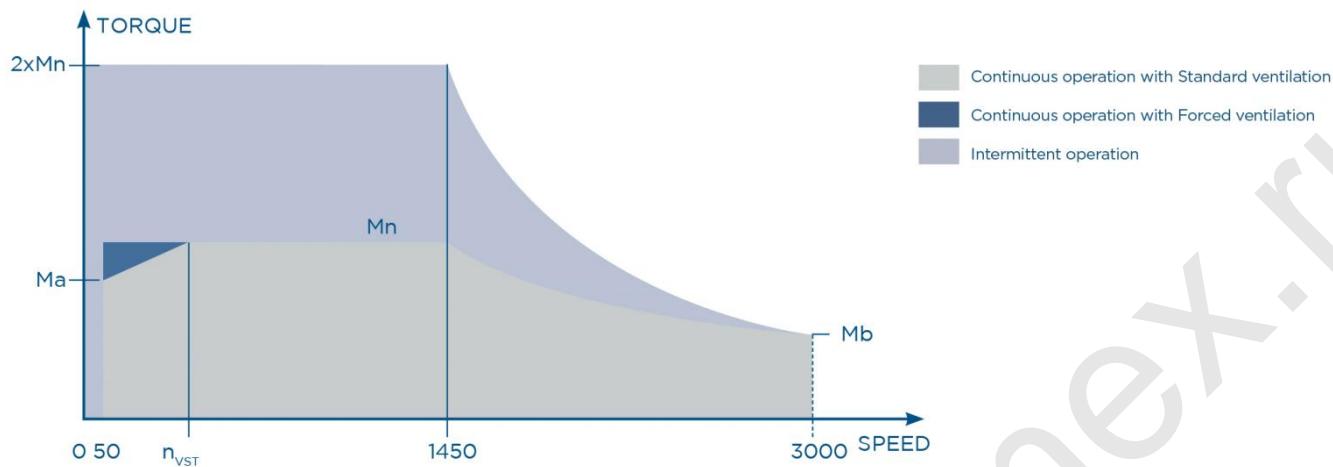
(1) With a 230V supply voltage

(2) At an ambient temperature of 25 °C and a carrier frequency of 8 kHz

| Drivon | | | | | P _n (kW) | n _n (rpm) | M _n (Nm) (1) | n _{max} (rpm) | M _b (Nm) (1) | n _{min} (rpm) | M _a (Nm) (1) | | n _{VST} (rpm) (2) |
|--------|-----|----|-------|--------|---------------------|----------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|------|----------------------------|
| DV | 123 | G1 | 0025S | TS71 | 0,25 | 950 | 2,5 | 2000 | 1,2 | 30 | 1,1 | 2,5 | 180 |
| DV | 123 | G1 | 0037S | TS80 | 0,37 | 950 | 3,7 | 2000 | 1,8 | 30 | 1,6 | 3,7 | 180 |
| DV | 123 | G1 | 0055S | TS80 | 0,55 | 950 | 5,5 | 2000 | 2,6 | 30 | 2,4 | 5,5 | 180 |
| DV | 123 | G1 | 0075S | TH90S | 0,75 | 950 | 7,5 | 2000 | 3,6 | 30 | 3,3 | 7,5 | 200 |
| DV | 123 | G1 | 0110S | TH90L | 1,1 | 950 | 11,1 | 2000 | 5,3 | 30 | 4,9 | 11,1 | 200 |
| DV | 123 | G1 | 0150S | TH100L | 1,5 | 950 | 15,1 | 2000 | 7,2 | 30 | 6,6 | 15,1 | 300 |

9.2 PERFORMANCES

Rated operating speed G2



P_n = motor shaft nominal power

M_n = continuous nominal torque

M_a = continuous torque at minimum speed

M_b = continuous torque at maximum speed

n_n = rated speed

n_{min} = minimum speed

n_{max} = maximum speed

n_{VST} = forced ventilation speed threshold

IC411 = STANDARD ventilation

IC416 = FORCED ventilation

(1) With a 230V supply voltage

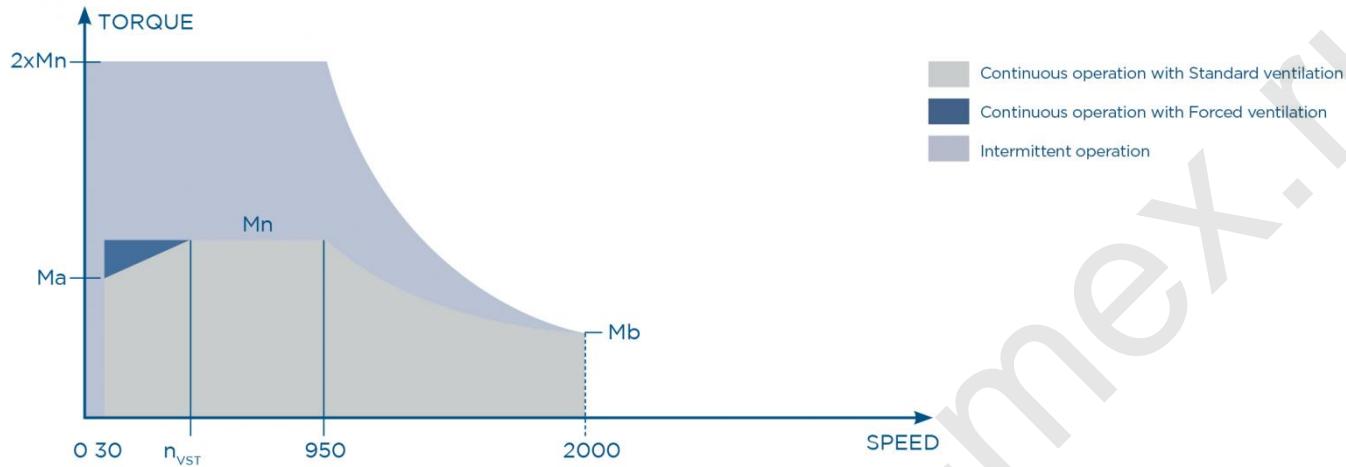
(2) At an ambient temperature of 25 °C and a carrier frequency of 8 kHz

| Drivon | | | | P _n (kW) | n _n (rpm) | M _n (Nm) (1) | n _{max} (rpm) | M _b (Nm) (1) | n _{min} (rpm) | M _a (Nm) (1) | n _{VST} (rpm) (2) |
|--------|-----|----|-------|---------------------|----------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|----------------------------|
| | | | | | | | | | | IC411 | IC416 |
| DV | 123 | G2 | 0025S | TS71 | 0,25 | 1450 | 1,6 | 3000 | 0,7 | 50 | 0,7 |
| DV | 123 | G2 | 0037S | TS71 | 0,37 | 1450 | 2,4 | 3000 | 1,1 | 50 | 1,1 |
| DV | 123 | G2 | 0055S | TS80 | 0,55 | 1450 | 3,6 | 3000 | 1,6 | 50 | 1,6 |
| DV | 123 | G2 | 0075S | TH80 | 0,75 | 1450 | 4,9 | 3000 | 2,1 | 50 | 2,2 |
| DV | 123 | G2 | 0110S | TH90S | 1,1 | 1450 | 7,2 | 3000 | 3,1 | 50 | 3,2 |
| DV | 123 | G2 | 0150S | TH90L | 1,5 | 1450 | 9,9 | 3000 | 4,3 | 50 | 4,4 |

9.2 PERFORMANCES

9.2.2 Version DV340

Rated operating speed G1



P_n = motor shaft nominal power

M_n = continuous nominal torque

M_a = continuous torque at minimum speed

M_b = continuous torque at maximum speed

n_n = rated speed

n_{min} = minimum speed

n_{max} = maximum speed

n_{VST} = forced ventilation speed threshold

IC411 = STANDARD ventilation

IC416 = FORCED ventilation

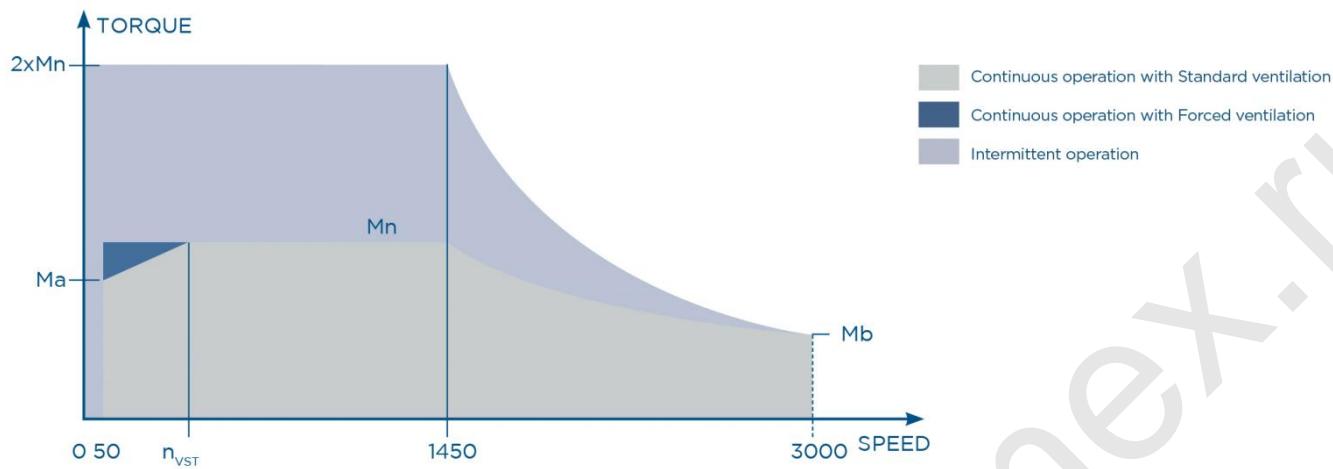
(1) With a 400V supply voltage

(2) At an ambient temperature of 25 °C and a carrier frequency of 8 kHz

| Drivon | | | | P _n (kW) | n _n (rpm) | M _n (Nm) (1) | n _{max} (rpm) | M _b (Nm) (1) | n _{min} (rpm) | M _a (Nm) (1) | IC411 | IC416 | n _{VST} (rpm) (2) |
|--------|-----|----|-------|---------------------|----------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|-------|-------|----------------------------|
| DV | 340 | G1 | 0025S | TS71 | 0,25 | 950 | 2,5 | 2000 | 1,2 | 30 | 1,1 | 2,5 | 180 |
| DV | 340 | G1 | 0037S | TS80 | 0,37 | 950 | 3,7 | 2000 | 1,8 | 30 | 1,6 | 3,7 | 180 |
| DV | 340 | G1 | 0055S | TS80 | 0,55 | 950 | 5,5 | 2000 | 2,6 | 30 | 2,4 | 5,5 | 180 |
| DV | 340 | G1 | 0075S | TH90S | 0,75 | 950 | 7,5 | 2000 | 3,6 | 30 | 3,3 | 7,5 | 200 |
| DV | 340 | G1 | 0110S | TH90L | 1,1 | 950 | 11,1 | 2000 | 5,3 | 30 | 4,9 | 11,1 | 200 |
| DV | 340 | G1 | 0150S | TH100L | 1,5 | 950 | 15,1 | 2000 | 7,2 | 30 | 6,6 | 15,1 | 300 |
| DV | 340 | G1 | 0220M | TH112 | 2,2 | 950 | 22,1 | 2000 | 10,5 | 30 | 9,7 | 22,1 | 350 |
| DV | 340 | G1 | 0300M | TH132 | 3 | 950 | 30,2 | 2000 | 14,3 | 30 | 13,3 | 30,2 | 350 |
| DV | 340 | G1 | 0400M | TH132 | 4 | 950 | 40,2 | 2000 | 19,1 | 30 | 17,8 | 40,2 | 350 |
| DV | 340 | G1 | 0550M | TH132 | 5,5 | 950 | 55,5 | 2000 | 26,3 | 30 | 24,4 | 55,5 | 400 |

9.2 PERFORMANCES

Rated operating speed G2



P_n = motor shaft nominal power

M_n = continuous nominal torque

M_a = continuous torque at minimum speed

M_b = continuous torque at maximum speed

n_n = rated speed

n_{min} = minimum speed

n_{max} = maximum speed

n_{VST} = forced ventilation speed threshold

IC411 = STANDARD ventilation

IC416 = FORCED ventilation

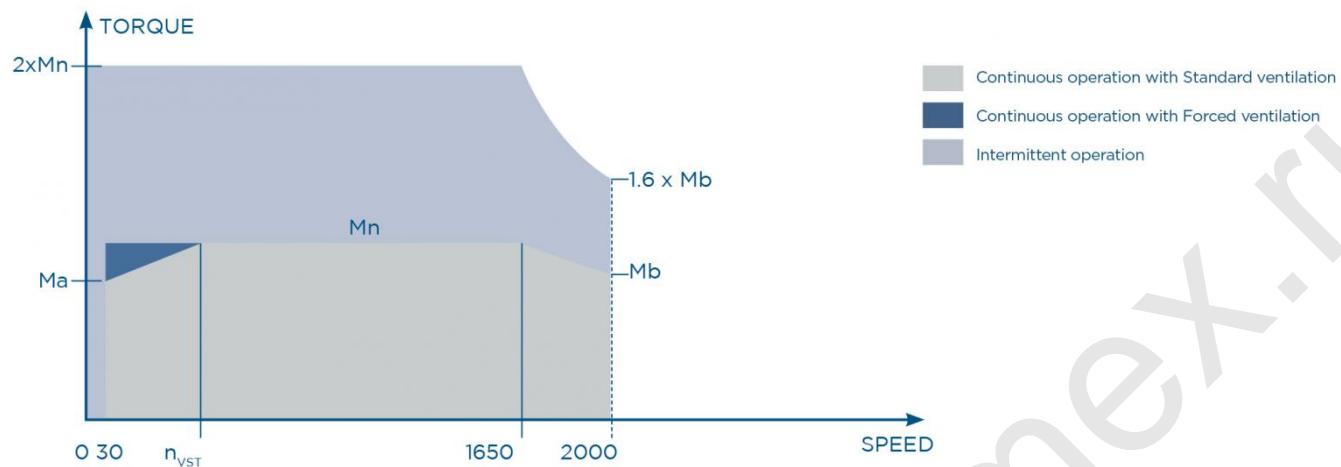
(1) With a 400V supply voltage

(2) At an ambient temperature of 25 °C and a carrier frequency of 8 kHz

| Drivon | | | | P _n (kW) | n _n (rpm) | M _n (Nm) (1) | n _{max} (rpm) | M _b (Nm) (1) | n _{min} (rpm) | M _a (Nm) (1) | n _{VST} (rpm) (2) |
|--------|-----|----|-------|---------------------|----------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|----------------------------|
| | | | | | | | | | | IC411 | IC416 |
| DV | 340 | G2 | 0025S | TS71 | 0,25 | 1450 | 1,6 | 3000 | 0,7 | 50 | 0,7 |
| DV | 340 | G2 | 0037S | TS71 | 0,37 | 1450 | 2,4 | 3000 | 1,1 | 50 | 1,1 |
| DV | 340 | G2 | 0055S | TS80 | 0,55 | 1450 | 3,6 | 3000 | 1,6 | 50 | 1,6 |
| DV | 340 | G2 | 0075S | TH80 | 0,75 | 1450 | 4,9 | 3000 | 2,1 | 50 | 2,2 |
| DV | 340 | G2 | 0110S | TH90S | 1,1 | 1450 | 7,2 | 3000 | 3,1 | 50 | 3,2 |
| DV | 340 | G2 | 0150S | TH90L | 1,5 | 1450 | 9,9 | 3000 | 4,3 | 50 | 4,4 |
| DV | 340 | G2 | 0220M | TH100 | 2,2 | 1450 | 14,5 | 3000 | 6,3 | 50 | 6,5 |
| DV | 340 | G2 | 0300M | TH100 | 3 | 1450 | 19,8 | 3000 | 8,6 | 50 | 8,9 |
| DV | 340 | G2 | 0400M | TH112 | 4 | 1450 | 26,4 | 3000 | 11,4 | 50 | 11,8 |
| DV | 340 | G2 | 0550M | TH132 | 5,5 | 1450 | 36,2 | 3000 | 15,7 | 50 | 16,2 |

9.2 PERFORMANCES

Rated operating speed G3



P_n = motor shaft nominal power

M_n = continuous nominal torque

M_a = continuous torque at minimum speed

M_b = continuous torque at maximum speed

n_n = rated speed

n_{min} = minimum speed

n_{max} = maximum speed

n_{VST} = forced ventilation speed threshold

IC411 = STANDARD ventilation

IC416 = FORCED ventilation

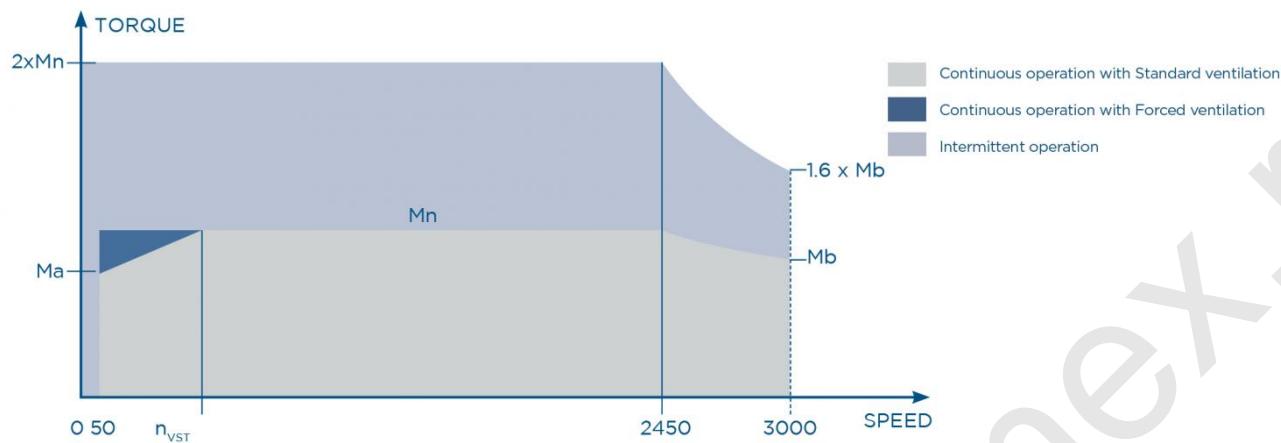
(1) With a 400V supply voltage

(2) At an ambient temperature of 25 °C and a carrier frequency of 8 kHz

| Drivon | | | | | P _n (kW) | n _n (rpm) | M _n (Nm) (1) | n _{max} (rpm) | M _b (Nm) (1) | n _{min} (rpm) | M _a (Nm) (1) | | n _{VST} (rpm) (2) |
|--------|-----|----|-------|--------|---------------------|----------------------|-------------------------|------------------------|-------------------------|------------------------|-------------------------|-------|----------------------------|
| | | | | | | | | | | | IC411 | IC416 | |
| DV | 340 | G3 | 0043S | TS71 | 0,43 | 1650 | 2,5 | 2000 | 1,2 | 30 | 1,1 | 2,5 | 180 |
| DV | 340 | G3 | 0064S | TS80 | 0,64 | 1650 | 3,7 | 2000 | 1,8 | 30 | 1,6 | 3,7 | 180 |
| DV | 340 | G3 | 0095S | TS80 | 0,95 | 1650 | 5,5 | 2000 | 2,6 | 30 | 2,4 | 5,5 | 180 |
| DV | 340 | G3 | 0130S | TH90S | 1,3 | 1650 | 7,5 | 2000 | 3,6 | 30 | 3,3 | 7,5 | 200 |
| DV | 340 | G3 | 0190M | TH90L | 1,9 | 1650 | 11,1 | 2000 | 5,3 | 30 | 4,9 | 11,1 | 200 |
| DV | 340 | G3 | 0260M | TH100L | 2,6 | 1650 | 15,1 | 2000 | 7,2 | 30 | 6,6 | 15,1 | 300 |
| DV | 340 | G3 | 0380M | TH112 | 3,8 | 1650 | 22,1 | 2000 | 10,5 | 30 | 9,7 | 22,1 | 350 |
| DV | 340 | G3 | 0520M | TH132 | 5,2 | 1650 | 30,2 | 2000 | 14,3 | 30 | 13,3 | 30,2 | 350 |

9.2 PERFORMANCES

Rated operating speed G4



P_n = motor shaft nominal power

M_n = continuous nominal torque

M_a = continuous torque at minimum speed

M_b = continuous torque at maximum speed

n = rated speed

n_{min} = minimum speed

n_{max} = maximum speed

n_{VST} = forced ventilation speed threshold

IC411 = STANDARD ventilation

IC416 = FORCED ventilation

(1) With a 400V supply voltage

(2) At an ambient temperature of 25 °C and a carrier frequency of 8 kHz

| Drivon | | | | | P _n (kW) | n _n (rpm) | M _n (Nm) (1) | n _{max} (rpm) | M _b (Nm) (1) | n _{min} (rpm) | Ma (Nm) (1) | | n _{VST} (rpm) (2) |
|--------|-----|----|-------|-------|---------------------|----------------------|-------------------------|------------------------|-------------------------|------------------------|-------------|-------|----------------------------|
| | | | | | | | | | | | IC411 | IC416 | |
| DV | 340 | G4 | 0043S | TS71 | 0,43 | 2450 | 1,6 | 3000 | 0,7 | 50 | 0,7 | 1,6 | 250 |
| DV | 340 | G4 | 0064S | TS71 | 0,64 | 2450 | 2,4 | 3000 | 1,1 | 50 | 1,1 | 2,4 | 250 |
| DV | 340 | G4 | 0095S | TS80 | 0,95 | 2450 | 3,6 | 3000 | 1,7 | 50 | 1,6 | 3,6 | 250 |
| DV | 340 | G4 | 0130S | TH80 | 1,3 | 2450 | 4,9 | 3000 | 2,3 | 50 | 2,2 | 4,9 | 250 |
| DV | 340 | G4 | 0190M | TH90S | 1,9 | 2450 | 7,2 | 3000 | 3,4 | 50 | 3,2 | 7,2 | 250 |
| DV | 340 | G4 | 0260M | TH90L | 2,6 | 2450 | 9,9 | 3000 | 4,7 | 50 | 4,4 | 9,9 | 400 |
| DV | 340 | G4 | 0380M | TH100 | 3,8 | 2450 | 14,5 | 3000 | 7 | 50 | 6,5 | 14,5 | 500 |
| DV | 340 | G4 | 0520M | TH100 | 5,2 | 2450 | 19,8 | 3000 | 9,6 | 50 | 8,9 | 19,8 | 500 |