

## 605

## 0.75 to 15kW

The unique Function Block Programming control scheme of the 605 series provides the total control flexibility required for the most demanding ac drive applications, whilst ensuring less onerous schemes can be simply satisfied straight from the box. In addition the ultra high performance sensorless vector algorithm guarantees a combination of high torque, low speed running.

The 605 series is available for use on single or three phase supplies and covers ratings from 0.75 to 15kW.




---

**HIGH TORQUE SENSORLESS VECTOR PERFORMANCE**

---

**FUNCTION BLOCK PROGRAMMING**

---

**CE MARKED AND EMC COMPLIANT WITH INTERNAL FILTERS**

---

**FIELD BUS PROTOCOL INTERFACES**

---

**INTELLIGENT POWER MODULE (IPM) TECHNOLOGY**

---

**SINGLE OR THREE PHASE SUPPLY**

---

**PARAMETER CLONING**

---

## TECHNICAL SPECIFICATION

**Power Supply** – 220-240V  $\pm 10\%$  single or three phase and 380-460V  $\pm 10\%$  Three phase, 50-60Hz  $\pm 5\%$

**Ambient** – 0-45°C, (40°C with NEMA 1 cover fitted) up to 1000m ASL without derating

**Overload** – 200% for 0.5 seconds, 150% for 60 seconds

**Output Frequency** – 0-480Hz

**Environmental Protection** – IP20–(NEMA 1 with optional cover)

## FEATURES

### 6051 Programming/Control Module

Detachable for 605 or front control panel mounting

32 character multi-lingual display

Wide viewing angle back lit LCD

Easy to use menu structure programming

Local control of speed, forward/reverse, run/stop and jog

Selectable first-up display

LED status indication

Password and function lock-out security

Parameter Cloning

### User Facilities

Sensorless vector autotune

Internal serial communication 'Technology Box'

Standard user application macros

Linear or 'S' ramps

Raise/lower ramp (digital MOP)

Ramp/coast/injection selectable braking modes

Selectable dual process ramps and program stop

Selectable switching frequency (with quiet pattern algorithm)

Local/remote select

8 - pre set speeds

4 - skip frequencies

Internal brake switch

Jog input

Process PID control

Spinning load 'flycatching' controlled start

Selectable auto restart after trip

Slip and underlap compensation

Fast connection spring loaded control terminals

Configurable inputs/outputs with function block programming

2 analogue inputs      1 analogue output

5 digital inputs      2 digital outputs

## Single Phase Controllers (230V Nominal)

Type	Nominal Power (kW)	Output Current (A)	Package size
605/007/230/1	0.75	4.0	A
605/015/230/1	1.5	7.0	A
605/022/230/1	2.2	10.5	B

## Three Phase Controllers (400V Nominal)

Type	Constant Torque Rating with 150% Overload for 60s		Quadratic 'Fan Law' Torque Rating with 110% Overload for 10s		Package Size
	Nominal Power (kW)	Output Current A	Nominal Power (kW)	Output Current A	
605/007/400/3	0.75	2.5	-	-	B
605/015/400/3	1.5	4.5	-	-	B
605/022/400/3	2.2	5.5	-	-	B
605/040/400/3	4.0	9.5	-	-	B
605/0055/400	5.5	12	7.5	16	C
605/0075/400	7.5	16	11	23	C
605/0110/400	11	23	15	31	C

## Three Phase Controllers (230V Nominal)

605/007/230/3	0.75	4.0	-	-	A
605/015/230/3	1.5	7.0	-	-	A
605/022/230/3	2.2	10.5	-	-	B
605/040/230/3	4.0	16.5	-	-	B

## Options

6051 Programming/Control Module		
6052 Remote Mounting Bezel and 3m Lead		
<b>Communication Technology Boxes</b>	<b>605A and B</b>	<b>605C</b>
Profibus	6053/PROF	6055/PROF
Modbus/RS422/RS485/EIBsynch	6053/EI00	6055/EI00
Link	6053/LINK	6055/LINK
Devicenet	6053/DNET	6055/DNET
Encoder feedback	AH467407 U001 (Board)	6054/HTTL
CZ389853 Brake Resistor (100W)		
CZ463068 Brake Resistor (200W)		
ConfigEd Lite+ 'windows' graphical configuration software (see page 38)		

Full range of optional EMC filters and line chokes see pages 34/35.

Brake resistor details see page 33.

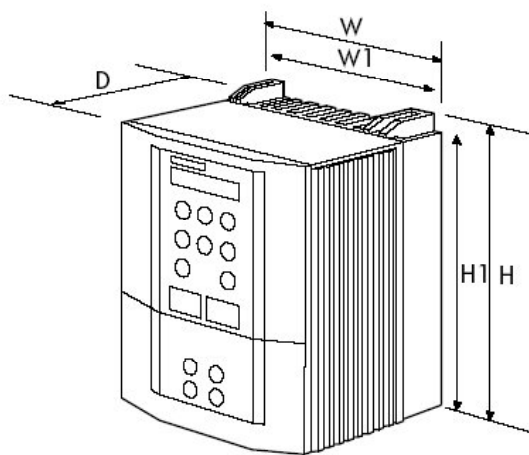
## Dimensions

Package Type	W	H	D	W1	W2	D1	Weight (Kg)
A	155	198	154.5	109	114	173.5	3.0
B	177	233	181	129	129	223	4.3
C	201	365	208	150	150	335	8.8

## STANDARDS

CE marked  
 EN61800-3 with integral filter (frame A&B) or external filter (frame C)  
 EN50178 (safety, low voltage directive)

UL listed to US and UL listed to Canadian safety standards



W2 Lower Mounting Centres