

590+ Integrator 1 to 2000 Hp

The Integrator Series is a single family of both AC drives (690+) and DC drives (590+) that provides the benefits of common programming, set-up and communications across both technologies. The 590+ Integrator series highly advanced DC drive meets the demands of the most complex motor control applications. Extensive application software (including winder control as standard) together with Function Block Programming and configurable I/O creates a total drive system in a single module.



...USER FRIENDLY
...NETWORK FRIENDLY
...SIMPLY POWERFUL

COMMON PROGRAMMING, SET-UP AND COMMUNICATIONS WITH 690+ AC INTEGRATOR SERIES

DRV OPTION WITH BUILT-IN CONTACTOR AND FUSES

SYSTEMS SPECIFICATION INCLUDING OPEN AND CLOSED LOOP WINDER CONTROL AS STANDARD

RATINGS UP TO 2700A AND SUPPLY VOLTAGES UP TO 660V

FUNCTION BLOCK PROGRAMMING BASED

INTERNAL CONTROLLED FIELD SUPPLY



ConfigEd Lite Plus

Lets you...

- Set up all parameters
- Autotune your application
- Chart key variables ON LINE!

220-690V Three-Phase Drives and Controllers

Type		Nominal Output (Hp)				DRV Output Current (Amps)	Controller Output Current (Amps)	Frame Size
DRV*	Controller**	230V Supply	460V Supply	575V Supply***	660V Supply***			
955+8R0007	-	3	7.5	-	-	15	-	1
955+8R0020		10	20			35		
955+8R0030		15	30			55		
955+8R0040		20	40			70		
955+8R0050		25	50			90		
955+8R0060		30	60			110		
955+8R0075		40	75			125		
955+8R0100		50	100			165		
955+8R0125	590+0243/500	60	125	-	-	206	246	3
955+8R0150		75	150			246		
955+8R0200-D4****	590+0380/500	100	200	250	-	360	380	4
955+8R0250-D4****	590+0500/500	125	250	300		425	500	
955+8R0300-D4****		150	300	350		490		
955+8R0400-D4****	590+0725/500	200	400	500		700	725	
955+8R0500-D4	590+0830/500	250	500	600		815	830	
955+8R0600-D5	590+1580/500	-	600	700	-	1000	1580	5
955+8R0700-D5			700	900		1200		
955+8R0800-D5			800	1000		1334		
955+8R0900-D5			900	1100		1500		
955+8R0600	590+1050/500	600	700	900	1050	1050	7b (N or R)	
955+8R0900	590+1450/500	900	1000	1250	1450	1450		
955+8R1000	590+2000/500	1000	-	-	1600	2000		
955+8R1250		1250	1500	1750	2000			
955+8R1500	590+2400/500	1500	1750	2000	2400	2400		

*Replace 'R' for regenerative with 'N' for non-regenerative;

**Replace 590+ for regenerative with 591+ for non-regenerative

***Consult factory for 575, 660 and 690 VAC part numbers.

****Change suffix to 'A4' for AC contactor and D4 for DC contactor

Options

Keypad (included) 6901

Remote mounting bezel and lead 6052

Communication Technology Box

Profibus 6055/PROF/00

Modbus/RS422/RS485/EIBisynch 6055/E100/00

Link 6055/LINK/00

DeviceNet 6055/DNET/00

Speed Feedback Technology Box

Analog Tachometer AH385870U001

Encoder feedback AH387775U0xx*

* Replace 'xx' with 05, 12, 15, 24 for 5VDC, 12VDC, 15VDC or 24VDC respectively.

Microtach feedback for acrylic fiber AH386025U002

Microtach feedback for glass fiber AH386025U001

590+ DRV

A new concept in DC drive technology

The DRV includes all the peripheral power components associated with a DC drive system integrally fitted within a compact footprint area. DRVs include the following integrally mounted within the drive:

Contactors; AC line fuses; DC fuse (regenerative versions); Control/field fuses; Optional motor blower starter; Optional auxiliary control transformer.

All major power components are mounted under the hinged cover within the footprint area of the drive.

TECHNICAL SPECIFICATION

Power Supply – 220-500V (±10%) three phase; 500-690V (±10%) three phase >675A

Ambient – 0-45°C (32-113°F); 0-40°C (32-104°F) >246A; derate 1% per°C to 55°C (131°F) max.

Altitude – 500m (1640 ft.) ASL; derate 1% per 200m (656 ft.) above 500m to 5000m (16400 ft.) max.

Overload – 200% for 10 seconds, 150% for 30 seconds

INPUTS/OUTPUTS

Analog Inputs – 5; 1 - Speed Demand Setpoint (±10V); 4 – User configurable; (1 x 12 bit plus sign, 4 x 10 bit plus sign)

Analog Outputs – 3; 1 - Armature Current Output (±10V or 0-10V); 2 – User configurable (10 bit)

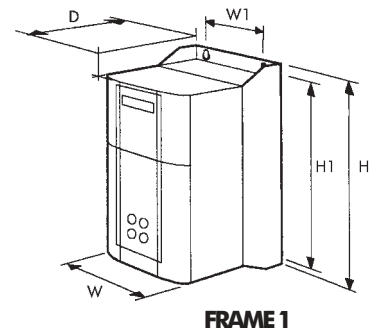
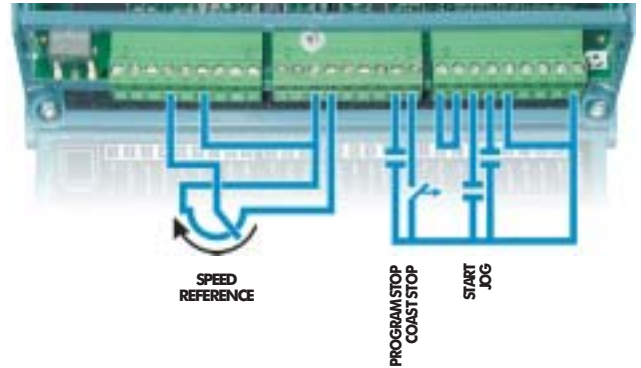
Digital Inputs – 9; Program Stop / Coast Stop / External Trip / Start-Run / 5 – User configurable (24V, max 15mA)

Digital Outputs – 3; User configurable (24V(max 30V) 100mA)

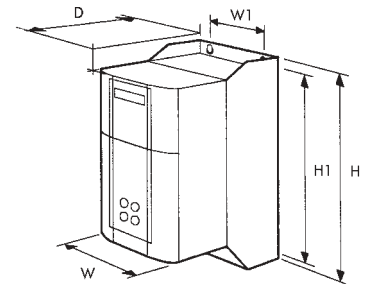
POWER SUPPLIES

Digital I/O Supply Total – 24 VDC (300 mA)

Analog Reference Supply – +10 VDC and –10 VDC (10 mA)



FRAME 1



FRAME 2

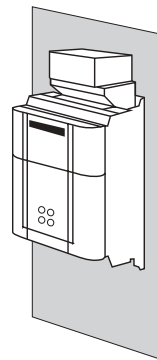
Dimensions

Frame Size	Size			Mounting			Weight Kg/Lbs	DRV H x W x D	Weight Kg/Lbs
	H	W	D	H1	H2	W1			
1	–	–	–	–	–	–	–	14.7 x 7.7 x 9	8.2/18
2	–	–	–	–	–	–	–	21.5 x 7.7 x 11.6	17/36
3	500/19.7	300/11.8	211/8.3	399/15.7	–	201/7.9	18.0/39.6	27 x 17 x 9.5	82/180
4	700/27.6	253/10.0	358/14.2	680/26.8	–	150/5.9	45.5/100	39 x 21.6 x 15.2	191/420
5	700/27.6	506/20.0	358/14.2	680/26.8	–	150/5.9	92.5/204	56 x 38 x 18.5	261/575
7aN	955/37.6	851/33.5	349/16.4	399/15.7	700/3.1	810/31.9	178.5/394	49 x 43 x 16	–/–
7aR	1407/55.4							69 x 43 x 16	
7bN	955/37.6							56 x 56 x 18	
7bR	1407/55.4							68 x 60 x 18	

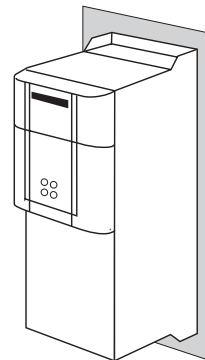
All dimensions in millimeters/inches.

STANDARDS

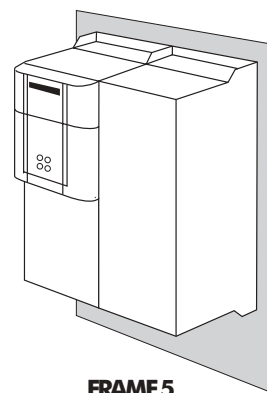
The 590+ series meets European and North American standards when installed in accordance with relevant product manual.



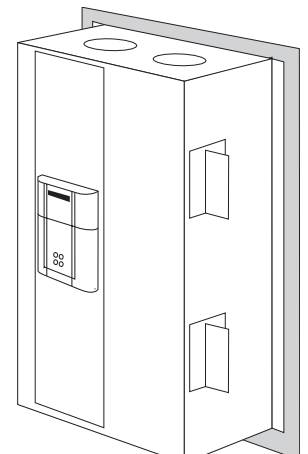
FRAME 3



FRAME 4



FRAME 5



FRAME 7

USER FRIENDLY

6901 MAN MACHINE INTERFACE

The 6901 Man Machine Interface is used for setting-up, programming and controlling the drive. It has been ergonomically designed with a back-lit, 32-character, alphanumeric display to provide intuitive access to all functions in a logical menu driven format.

Key features include:

- Detachable for 590+ or control panel mounting
- Local control of speed, start/stop, jog and direction
- Customized displays and legend
- Password and function lockout
- Quick set up menu



Multi-lingual plain language

English • French • German • Spanish • Italian

Quick set-up

Bypasses advanced features for simple applications

Autotune

Custom tunes drive for full torque without turning motor shaft

Customized screens

Customize to display application-specific engineering units

Easy Configuration

Connect any function block to any other



- LINK
- DeviceNet
- ControlNet
- ProfiBus
- ModBus
- ModBus Plus
- Ethernet
- CANopen
- LonWorks

NETWORK FRIENDLY

Communication techboxes plug onto the drive and allow users to monitor and control the drive on many industry standard fieldbus networks.

SIMPLY POWERFUL

FUNCTION BLOCK PROGRAMMING

Function Block Programming allows almost limitless combinations of user functions to be realized with ease. Out of the box the Function Blocks are pre-configured for immediate use. However by using the programming keypad or ConfigEd Lite Plus software (see page 35) each function can be interconnected to perform many other control actions. Some of the many function blocks are:

- Inputs
- Outputs
- Ramps
- Raise/Lower
- Winder Functions (diameter, torque, taper, compensations...)
- PID
- Field Control
- Jog/Slack control

