

# SERVO DRIVES

## 635/637f 1 to 30A

### 635/637f

Torque, speed, position or motion control are all standard operations of the 635/637f series AC brushless servo drive – without the need for external controllers. Each has its own internal power supply for direct connection to either 230V or 400V AC supplies and is available as part of a total servo package including motors, servo gearboxes and interconnecting cables.

The 635/637f is available as either individual compact modules or as rack mounted assemblies with up to 9 drives in a single rack.



**1500 STEP INTERNAL MOTION CONTROLLER**

**DIRECT CONNECTION TO 230V OR 400V AC SUPPLIES**

**MODULE OR RACK MOUNTED**

**SIMPLE COMMISSIONING AND PROGRAMMING SOFTWARE**

**COMPLETE PACKAGE OF MOTORS, SERVO GEARBOXES AND INTERCONNECTING CABLES**

**FIELDBUS COMMUNICATION OPTIONS**

### TECHNICAL SPECIFICATION

#### 635 Series

**Power Supply** – 220 - 230V (±10% single or three phase up to 7A), 50 - 60 Hz ±5%

Type	Output Current Continuous (A)	Output Current Peak (A)
635-K DER 01	1.0	5.0
635-K DER 03	2.5	5.0
635-K DER 05	5.0	10
635-K DER 07	6.5	10

#### 637f Series

**Power Supply** – 380 - 460V (±10% three phase)

Type	Output Current Continuous (A)	Output Current Peak (A)
637-K D6R 01.S5-7	1.0	4.0
637-K D6R 02.S5-7	2.0	4.0
637-K D6R 04.S5-7	4.0	8.0
637-K D6R 06.S5-7	6.0	12
637-K D6R 10.S5-7	10	20
637-K D6R 16.S5-7	16	32
637-K D6R 22.S5-7	22	44
637-K D6R 30.S5-7	30	60

**Peak Output Current** – Stated peak output currents are for a minimum 5 seconds

**Ambient** – 0 - 40°C (Derate 2%/°C up to 50°C max) Up to 1000m ASL (Derate 1%/100m up to 4000m max)

#### Inputs/Outputs

- 8 - Digital Inputs (inc 2 interrupts)
- 5 - Digital Outputs (3 x Opto-coupled, 2 x Relay)
- 2 - Analogue Inputs ( -10V / 0 / +10V)
- 1 - Analogue Output (0 - 10V)

Motor Resolver Input

Encoder (Configurable Input or Output)

#### Serial Communication Options

RS232	PROFIBUS DP
RS422	INTERBUS S
RS485	SUCOnet K

CANbus

Sin/Cos Encoder Option

#### Input/Output Expansion Options

**635** – Additional 5 Digital Inputs/2 Digital Outputs

**637f** – Additional 14 Digital Inputs/10 Digital Outputs

#### Dimensions

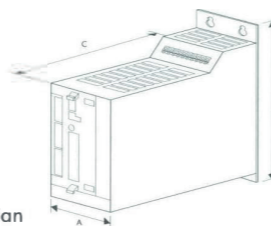
	A	B	C
635	1 to 6.5 Amps	91	249
637	1 to 10 Amps	61.5	400
637	16 to 30 Amps	104	400

Allow extra 70mm in front of unit for plugs/cables.

#### STANDARDS

- CE marked
- EN61800-3 (EMC compliance) with external filter
- EN50178 (safety, low voltage directive)

UL listed to US and cUL listed to Canadian safety standards



### 631 and 635/637f Ancillary Equipment

#### Port Number Description

#### CABLES / CONNECTORS

**Complete cable sets with connectors ready fitted at motor and drive end**

CM469021Uxx0	Drive to ACG/ACM2n motor POWER. Non repetitive flexing, no broke core
CM469023Uxx0	Drive to ACG/ACM2n motor POWER. Repetitive flexing, with broke core
CM469095Uxx0	Drive to ACR(L) size 4 motor POWER. Repetitive flexing, with broke core
CM469025Uxx0	Drive to ACG/ACM2n/ACR(L) RESOLVER. Non repetitive flexing
CM469027Uxx0	Drive to ACG/ACM2n/ACR(L) RESOLVER. Repetitive flexing

xx = Complete cable set length; Standard lengths 2, 5, 10m. eg CM469021U050 = 5m length

**Loose Cable (no connectors)**

CM469020	Drive to ACG/ACM2n motor POWER. Non repetitive flexing, no broke core
CM469022	Drive to ACG/ACM2n motor POWER. Repetitive flexing, with broke core
CM469094	Drive to ACR(L) size 4 motor POWER. Repetitive flexing with broke core
CM469024	Drive to ACG/ACM2n/ACR(L) RESOLVER. Non repetitive flexing
CM469026	Drive to ACG/ACM2n/ACR(L) RESOLVER. Repetitive flexing

#### Loose Connectors

CI469039	Motor POWER CONNECTOR for ACG/ACM2n (size 0-3)
	Motor POWER CONNECTOR for ACR(L)
CI467068	Motor RESOLVER CONNECTOR for ACG/ACM2n/ACR(L)
	X10 I/O Drive Connector for 635/7
	X30 Resolver Drive Connector for 635/7
	X40 Encoder Drive Connector for 635/7
	COM 2 Communications Drive Connector for 635/7
LA467063	Package X10,X30,X40 and COM 2 Drives Connectors for 635/7
LA467064	X10 Test adaptor connector for 635/7

#### 631 Interconnection Cables/Connectors

CM469036U001	631 X20-X20 or X40-X40 100mm interconnecting cable with connectors both ends
CM469029U010	631 X20 1m cable (4 core) with drive connector one end
CM469033U010	631 X40 1m cable (8 core) with drive connector one end
CM469031U003	631 X20 to 635/637/IBT MMI 300mm interconnecting cable with connectors both ends
CI469030	631 X20 CANbus terminator plug
CM469034U003	631 X40 to 635/7 X40 300mm interconnecting cable with connectors both ends

#### 635/637f COMMUNICATION AND EXTENDED I/O OPTION BOARDS

AH467059U001	Profibus DP (Factory fit only)
AH467059U002	CANbus RP
AH467059U003	Devicenet (Factory fit only)
AH467059U004	Suconet K (Factory fit only)
AH467059U005	RS232
AH467059U006	RS485
AH467059U007	RS422
AH467059U008	Interbus S (Factory fit only)
	635 5 Inputs / 2 Outputs Expansion board
	637 14 Inputs / 10 Output Expansion board

#### CANBUS ANCILLARY EQUIPMENT

LA469119	8 Channel I/O Expansion Module
LA469118	BCD Switch Module - 6 Digit
	BCD Switch Module - 5 Digit plus sign
LA469121	BCD Switch Module - 6 Digit with 6 digit LED readout
	BCD Switch Module - 5 Digit plus sign with 6 digit LED readout

#### 635/637f EMC EQUIPMENT (NB 631 Series has internal RFI filters)

C0467071	12A 230V 1 phase RFI filter
C0467072	8A 480V 3 phase RFI filter
C0467557	18A 480V 3 phase RFI filter
C0467580	34A 480V 3 phase RFI filter
LA467069	635 (KDER03...07) Cable clamp kit
	635 (KDERTQ) Cable clamp kit
LA467070	637 (KD6RD2...10) Cable clamp kit
	635 (KD6R1 6...30) Cable clamp kit

#### SOFTWARE AND ASSOCIATED HARDWARE

LA469099U002	631 EASYRIDER 'Windows' Software Development Kit including
LA387599	- PC to 631 Programming cable
RD467061U006	- EASYRIDER Software disc
HA467060	- BIAS Programming manual
LA469102U002	635/637 EASYRIDER Software Development Kit including
CM467062	- PC to 635/7 Programming cable
RD467061U006	- EASYRIDER Software disc
HA467060	- BIAS Programming manual
LA467064	- X10 Test adaptor plug

#### MMI (MAN MACHINE INTERFACE)

	4 x 20 Character IBT MMI
	MMI to 635/7 2m Interconnecting cable with connectors
	MMI to PC 2m Programming Cable
	MMI Programming Software

## 631 and 635/637f 1 to 6A



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