QUANTUM CONTROLS PRESENTS

THE

ULTIMATE SOLUTION

FOR APPLICATIONS WHERE SPACE SAVINGS, SILENT OPERATION OR DURABILITY IN HARSH ENVIRONMENTS IS A MUST



ABB MULTI DRIVE FOR SALE

All-compatible drive | Various types of supply units including diode supply units and regenerative supply units Available as air and liquid-cooled versions Single supply and DC bus arrangement with several inverters reduce line power and system size. Utilize premium control of virtually any type of AC motor with direct torque control (DTC) | Induction and permanent magnet motors and synchronous machines | Solutions to many different applications (such as paper machines, winders, rolling mills, processing lines, cranes, drilling, and marine) are possible | Flexible connectivity and an extensive range of options

INCOMER SECTION

- ACS207-1050A-7
- 2x ACS880-0600-7 r8i modules
- Internal DU/DT filter in R8i
- EMC second environment
- Line Contactor
- · Disconnect switch
- · Earth grounding switch
- Terminals for UPS
- · Aluminium DC buss bars
- · Cable supply conductor
- 230v ac control tx
- · Electrical disconnect push button on door
- · Multimeter for A,V,Kw,Kw hr
- · Arc monitoring unit 1 loop including cable(fibres)
- Corrosion Classification coupon in ACU
- Aux transformer
- Bottom Entry/Exit
- · ACS-AP-W control panel
- FENA 11 Ethernet IP modules

Section 1 - 160kw

- Acs880-107-0190a-7
- R6i 160kw
- DU/DT filter
- EMC 2nd Environment Terminals for UPS
- DC Switch Disconnect option 230 v aux tx
- · ACS-AP-W control panel

Section 2 - 160kw

- · Acs880-107-0190a-7
- R6i 160kw
- DU/DT filter
- EMC 2nd Environment
- · Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

Section 3 - 160kw 0130A-7

- Acs880-107-0190a-7
- R6i 160kw
- DU/DT filter
- EMC 2nd Environment
- · Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- · ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

Section 4 - 200kw

- · Acs880-107-0220a-7 R7i
- · 200kw
- · DU/DT filter
- EMC 2nd Environment
- · Terminals for UPS
- · DC Switch Disconnect option
- 230 v aux tx
- · ACS-AP-W control panel
- FENA 11 MODULE
- · FSO Safety module

Section 5 - 7.5kw

- Acs880-107-009a8-7 R5i 7.5kw
- DU/DT filter
- EMC 2nd Environment
- · Terminals for UPS
- · DC Switch Disconnect option
- 230 v aux tx
- · ACS-AP-W control panel
- FENA 11 MODULE
- · FSO Safety module
- · Acs880-107-0042a-7 R5i 37kw
- DU/DT filter
- EMC 2nd Environment
- · Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- · ACS-AP-W control panel
- FENA 11 MODULE
- · FSO Safety module

Section 6 - 110kw

- · Acs880-107-0130a-7 R6i 110kw
- · DU/DT filter
- EMC 2nd Environment
- · Terminals for UPS
- · DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- · FSO Safety module

Section 7 - 37kw 0978-7 018A-7

- Acs880-107-0042a-7 R5i 37kw
- · DU/DT filter
- EMC 2nd Environment
- · Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- · ACS-AP-W control panel
- FENA 11 MODULE
- · FSO Safety module





Section 8 - ACS 8880-107-0800A-F

- · DC Disconnection Switch
- IP22
- · 2nd Env Filter
- · Terminates Fen UPS
- FENA 11
- FSC 12
- FEN 31

Section 9 - 7.5kw

- · Acs880-107-009a8-7 R5i 7.5kw
- DU/DT filter
- EMC 2nd Environment
- Terminals for UPS
- DC Switch Disconnect option
- 230 v aux tx
- ACS-AP-W control panel
- FENA 11 MODULE
- FSO Safety module

SAFETY PLC

- · ABB ACS800M PLC Cubicle
- CI858K01 DriveBus Interface

For more information, contact us: sales@guantum-controls.co.uk or 01661 835 566

Technical data

Mains connection		Environmental limits	
Voltage and power range	3-phase, UN3 380 to 415 V, +10%/-10% 3-phase, UN5 380 to 500 V, +10%/-10% 3-phase, UN7 525 to 690 V, +10%/-10% Inverter unit (INU) 1.5 to 6000 kW Diode supply unit (DSU) 50 to 5500 kVA IGBT supply unit (ISU) 300 to 6944 kVA Regenerative rectifier unit (RRU) 400 to 6100 kVA	Ambient temperature Transport Storage Operation area (air-cooled) (liquid-cooled)	- 40 to +70°C - 40 to +70°C 0 to +40°C, no frost allowed + 40 to 50°C with derating of 1% /1°C to +45°C, no frost allowed + 45 to +55°C with derating of 0.5%/
Frequency	50/60 Hz ±5%	Cooling method	
Power factor	IGBT supply unit (ISU): $ -\cos \phi = 1 \text{ (fundamental)} $ $ -\cos \phi = 0.99 \text{ (total)} $ Diode supply unit (DSU) and regenerative rectifier unit (RRU): $ -\cos \phi = 0.98 \text{ (fundamental)} $ $ -\cos \phi = 0.93 \text{ to } 0.95 \text{ (total)} $	Air-cooled Liquid-cooled	Dry clean air Direct liquid-cooling, coolant Antifro L Incoming coolant temperature to module (-x07LC): - 0 to +40°C as standard - +40 to +45°C with derating of 2%/1 - +45 to +50°C with derating of 2%/1 or 6%/1°C 7) Incoming coolant temperature to optional liquid-cooling unit (-1007LC)
Efficiency (at nominal power)	98% with DSU and RRU 97.5% with ISU		
Motor connection		_	(fresh water or sea water): - 0 to +36°C as standard
Voltage	3-phase output voltage 0 to $\rm U_{N3}$ / $\rm U_{N5}$ / $\rm U_{N7}$	_	- $+36$ to $+46$ °C with derating of 2% /
Frequency	0 to ±598 Hz ^{1) 3)}	Altitude	
Motor control	Direct torque control (DTC)	- 0 to 1,000m - 1,000 to 4,000m	Without derating With derating of 1% / 100 m 4)
Torque control	Torque step rise time:		
Open loop Closed loop	<5 ms with nominal torque<5 ms with nominal torqueNon-linearity:	Relative humidity Degree of	5 to 95%, no condensation allowed
Open loop Closed loop	- ± 4% with nominal torque - ± 3% with nominal torque	protection Air-cooled	IP22 as standard (IP20 cabinet doors of IP42 or IP54 as option
Speed control Open loop	Static accuracy: - 10% of motor slip	Liquid-cooled	
Closed loop	- 0.01% of nominal speed Dynamic accuracy:	Paint colour	RAL 9017, RAL 7035
Open loop Closed loop	- 0.3 to 0.4% seconds with 100% torque step - 0.1 to 0.2% seconds with 100% torque step	Pollution degree	PD 2
		Contamination levels	No conductive dust allowed
Product compliance CE		Storage	IEC 60721-3-1:1997, Class 1C2 (chem gases), Class 1S2 (solid particles) *)
Low Voltage Directive 2014/35/EU according to EN 61800-5-1:2007 Machinery Directive 2006/42/EC EMC Directive 2014/30/EU ATEX Directive 2014/34/EU, EN 50495 Quality assurance system ISO 9001 and		Operation	IEC 60721-3-3:2002, Class 3C2 (cher gases), Class 3S2 (solid particles) *)
		Transportation	IEC 60721-3-2:1997, Class 2C2 (chem gases), Class 2S2 (solid particles) *)
Environmental system ISO 14001 RoHS 2011/65/EU and Delegated Directive (EU) 2015/836 cULus listed according to UL 508A and CSA C22.2 No. 14, CSA certified according to CSA C22.2 No. 14 RCM, EAC ²⁾ TÜV Nord certification for functional safety ⁵⁾		Vibration	IEC 60068-2-6, 10 to 57 Hz 0.075 mm displacement amplitude 57 to 150 Hz Units with marine construction: - Max. 1 mm (peak value 2 to 13.2 Hz - Max. 0.7 g (13.2 to 100 Hz) sinusoid
ATEX-certified safe disconnection function and thermistor & PT100 protection functions, Ex II (2) GD ⁶⁾ Marine type approvals, see http://new.abb.com/drives/segments/marine/marine-type-approvals		°) C = Chemically active substances °) S = Mechanically active substances °) Operation above 120 Hz might require type specific derating, please contail local ABB office 2 EAC has replaced GOST R 3 For higher operational output frequencies please contact your local ABB of Derating reduced by lower than 40°C ambient temperature For available certificates, see http://new.abb.com/drives/functional-safety 6 Thermistor protection function (+L537+Q971)	
EMC according to EN 61800-3: 2004 + A1: 2012			
1st environment, restricted distribution category C2,			

as option 1000 A and up to 500 V

environment, unrestricted distribution category C3, as option

= Chemically active substances

- Mechanically active substances
- peration above 120 Hz might require type specific derating, please contact your cal ABB office

+ 40 to 50°C with derating of 1% / 1°C 0

+ 45 to +55°C with derating of 0.5%/1°C

Direct liquid-cooling, coolant Antifrogen®

- +40 to +45°C with derating of 2%/1°C

- +45 to +50°C with derating of 2%/1°C

- +36 to +46°C with derating of 2%/1°C

IP22 as standard (IP20 cabinet doors open)

IP42 as standard (IP20 cabinet doors open)

IEC 60721-3-1:1997, Class 1C2 (chemical

IEC 60721-3-3:2002, Class 3C2 (chemical

IEC 60721-3-2:1997, Class 2C2 (chemical

displacement amplitude 57 to 150 Hz 1g

- Max. 0.7 g (13.2 to 100 Hz) sinusoidal

- AC has replaced GOST R
- or higher operational output frequencies please contact your local ABB office
- erating reduced by lower than 40°C ambient temperature
- r available certificates, see
- tp://new.abb.com/drives/functional-safety
- 6) Thermistor protection function (+L537+O971)
- PTC/PT100 thermal motor protection (+L513/L514+Q971)
- ⁷⁾ See product specific hardware manual for detailed derating rules.

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