
ABB industrial drives

ACS880-07XT, cabinet-built single drives, 630kW~1200kW



The ACS880-07XT is part of ABB's new all-compatible drives portfolio. The drives are compatible with virtually all types of AC motors, automation systems, users and business.

High cost effective solution

ACS880-07XT is based on ACS880-04XT, the module of ACS880-04XT is slightly different from the module of ACS880-04. Two identical R10 or R11 modules are parallel-connected as one unit which is similar to ACS880 multi drive. Total power of parallel-connected module equals two ACS880-04 modules. But the ACS880-07XT offers more cost-effective solution than ACS880 multi drive. The main power supply of ACS880-07XT is from two-winding transformer or three-winding transformer. ACS880-07XT can work at 6 pulse operation mode or 12 pulse operation mode. 12pulse rectifier has lower harmonics than 6 pulse rectifier.

ACS880-07XT cabinet-built drive is built to order, meeting customer need despite any technical challenges. Designed on ABB's common drives architecture, this compact drive comes in different sizes for easy assembly and commissioning.

These single drives are customized to the precise needs of industries such as oil and gas, mining, metals, chemicals, cement, power plants, material handling, pulp and paper, woodworking and marine. Typical applications including cranes, extruders, winches, conveyors, mixers, compressors, pumps and fans. The drive configuration contains a rectifier, DC link, inverter, fuses and a main switch, all built into a compact cabinet. The features and options include extended inputs and outputs, fieldbus options, du/dt filtering, EMC filtering and a brake chopper.

Induction motors, synchronous motors and induction servo motors are all supported as standard without the need for additional software. The drive can control the motors in either open loop or closed loop, through its high precision motor control platform, direct torque control (DTC). Built in safety features reduce the need for external safety components.

ACS880-07XT is belong to ACS880 series products. ACS880 series are developed at same platform. The interface, options, auxiliary components are universal. ACS880-07XT is based on ACS880-04XT single drive modules, ACS880 multi drive control unit and sturdy cabinet of ACS880-07. Having benefits of both single drive and multi drive, ACS880-07XT can work well like other ACS880 products.

Main features of ACS880-07XT

- Compact design for easy cabinet assembly and maintenance
- Main switch and fuses
- Cabling solutions include bottom entry and exit
- Enclosure class IP22, IP42 for different environments, with options
- Integrated safety including safe torque off (STO) as standard
- Supports various motor types
- Drive composer PC tool for commissioning and configuration
- Intuitive and easy to operate control panel with USB connection
- Device panel for optional switches and lights

- Primary control program, common software used throughout ACS880 drive series
- Control unit supporting a wide range fieldbuses, feedback, devices, and input/output options
- Removable memory unit for easy maintenance
- Coated boards as standard
- Extensive programmable digital and analog inputs and outputs
- Line choke as standard
- Long lifetime capacitors
- Cooling fans with on/off control
- Braking chopper option inside the module
- EMC filter option
- du / dt filter option
- Common filter as standard
- Cabinet heater option



Ratings, types and voltages

ACS880-07XT										
IEC RATINGS										
ACS880-07XT-	Nominal ratings					Light-duty use		Heavy-duty use		Frame size
	I_N	I_{max}	$I_{max\ start}$	P_N	S_n	I_{Ld}	P_{Ld}	I_{Hd}	P_{Hd}	
	A	A	A	kW	kVA	A	kW	A	kW	
$U_N = 400\ V$										
1190A-3	1190	1343	1755	630	824	1167	630	878	500	2×R10
1610A-3	1610	2024	2024	900	1115	1570	900	1274*	710	2×R11
$U_N = 500\ V$										
1160A-5	1160	1343	1755	800	1005	1146	800	878	630	2×R10
1610A-5	1610	2024	2024	1000	1394	1570	1000	1274**	900	2×R11
$U_N = 690\ V$										
0810A-7	810	1168	1356	800	968	791	710	678*	630	2×R10
1080A-7	1080	1472	1858	1000	1291	1051	1000	929	900	2×R11
1320A-7	1320	1509	2024	1200	1578	1297	1200	1051***	1000	2×R11

U_N	Nominal voltage of the drive
S_n	Apparent power (no overload)
I_{max}	Maximum output current. Available for 10 seconds at start, otherwise as long as allowed by drive temperature. 140% ... 200% of I_{Hd} , depending on power rating.
I_N	Rated current available continuously without overload ability at 40°C. (104°F)
P_N	Typical motor power in no-overload use
I_{Ld}	Continuous rms output current allowing 10% overload for 1 minute every 5 minutes
P_{Ld}	Typical motor power for light-overload use.
I_{Hd}	Continuous rms output current allowing 50% overload for 1 minute every 5 minutes
P_{Hd}	Typical motor power for heavy-duty use.
*	Continuous rms output current allowing 40% overload for 1 minute every 5 minutes
**	Continuous rms output current allowing 45% overload for 1 minute every 5 minutes
***	Continuous rms output current allowing 44% overload for 1 minute every 5 minutes

Frame size	IP22/42 Height (mm)	6-pulse width (mm)	12-pulse width (mm)	Depth (mm)	6-pulse weight (kg)	12-pulse weight (kg)
2×R10	2145	1830	1830	698	1100	1160
2×R11	2145	1830	1830	698	1230	1300



For more information please contact
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