

EXP800K6 Air-Cooled Split Type High Power Charger

800kW Power Cube/12 Charging Connectors/MCS Dispenser/Overhead Charging Dispenser Solution



Introduction

EXP800K6-FWR8 split type high power charger is specifically designed for the EV charger operators with split and multi charging point applications. It supports MCS/CCS/NACS/GBT charging connectors, delivers up to 800kW/1.6MW of output power, and accommodates up to 12 charging connectors via 6 dual-connector dispensers or 12 single-connector dispensers. It also supports 500A/600A/1500A liquid-cooled charging connectors, and each connector can receive maximum power through intelligent power switching. An intelligent power switching matrix dynamically allocates power modules among charging connectors, maximizing overall power utilization efficiency. Two power cubes can be connected in parallel to achieve 1.6MW output, equipped with an MCS charging dispenser.

Main Features

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|---|--|---|---|
|  | Building-block modular design, simplified & standardized interface |  | Customizable dispenser, overhead dispenser solution for bus depots |
|  | Up to 12 charging channels, configurable for 300A, 500A, or max 800A output |  | WEB/APP Maintenance Backend System enhances the operation and maintenance effectiveness |
|  | TUV CE, cTUVus, RED, CB, FCC, OCA, and NMI Eichrecht certification |  | Supports two power cubes in parallel for one dispenser, delivering up to 1.6MW output power |
|  | Power cube IP55, floor-standing dispenser IP55, overhead dispenser IP65, reliable & robust |  | Power cube 65dB, floor-standing dispenser 55dB, overhead dispenser 0dB |
|  | High power density with best space efficiency |  | Patented U-Type air duct design |
|  | BABA support | | |

Technical Parameters

Power Cube		EXP800K6-FWR8						
AC Input	Frequency/Voltage	45Hz~65Hz; CE: 3-phase+(N)+PE, 380/400Vac±10%; UL: 3-phase+(N)+PE, 480Vac±10%						
	Max input current	CE: 2*640A@380Vac; UL: 2*506A@480Vac						
	Power factor	>0.99						
	THDi	<5% (rated input)						
DC Output	Voltage	150Vdc~1000Vdc (constant power voltage range 300Vdc~1000Vdc)						
	Max output current	800A for each output charging channel						
	Max output power	800kW						
	Output channel	Max 12 output charging channels as the input of the charging dispensers						
	Dispenser support	Max 6 dual-connector dispensers or 12 single-connector dispensers						
Performance	System efficiency	97% (peak efficiency)						
	Standby power	70W						
	Noise	<65dB						
Mechanical Parameters	Dimensions (W*D*H)	1050mm*1100mm*2200mm						
	Weight (cabinet+module)	800kg+20*17kg=1140kg						
Others	Power module	20 * REG1K0135G2 (40kW 1000V)						
	Power switching mode	Intelligent power switching matrix dynamically allocates power modules among charging connectors, maximizing overall power utilization efficiency						
	HMI	RGB LED, E-STOP						
	HMI kiosk (optional)	Tempered glass protective 10.1" capacitive touch screen LCD, RFID, POS (optional)						
	Protection rating	IP55						
	Certification	TUV CE, cTUVus, RED, CB, OCA						
Manufacture		BABA support						
Charging Dispenser		Floor-Standing Dispenser					Overhead Dispenser	
		G3 Dispenser				MCS Dispenser		
		EXP250-FFC	EXP400-FFC	EXP500-LL5C EXP600-LL6C	EXP800-LC	EXP1500-HLL5C/6C		EXP250/400-FSW
DC Input	Voltage	150Vdc~1000Vdc						
	Input channel	2			1	2/3	1	
DC Output	Charging cable	2			1	2	1	
	Voltage	150Vdc~1000Vdc						
	Max output current	2*250A	2*375A	2*500/600A	800A	1500A+500A/600A	250A/375A	
	Optional (boost current)	2*375A	2*500A	2*700A	1000A	1500A+700A	375A/500A	
	Max output power	2*250kW	2*375kW	2*500/600kW	800kW	800kW/1600kW	250kW/375kW	
Mechanical Parameters	Dimensions (W*D*H)	560*300*2000mm				355*730*2200mm	763*240*415mm	
	Weight	230kg			260kg	330kg	50kg	
Others	HMI	Tempered glass protective 10.1" (optional 21.5") capacitive touch screen LCD, RGB panel LED, E-STOP, RFID, QR code, POS (optional)						
	Metering	DC energy meter, MID-certified meter, optional NMI-certified meter						
	Backend	OCPP 1.6J/2.0.1 (optional 2.3X), PnC/OTA/smart charging/power management support, LTE wireless modem/Ethernet						
	Cable management	Top-mounted swing-arm for cable retraction						
	MBE function	WEB/APP Maintenance Backend System enhances the operation and maintenance effectiveness						
	Charging protection	Overcurrent/short circuit/overvoltage/undervoltage/RCD/insulation/overtemperature protection Reverse polarity protection						
	Charging connector	2*CCS/NACS/GBT or CCS+NACS/GBT or 1*CCS/NACS/GBT				CCS+MCS/NACS+MCS/ GBT+MCS/CCS+CCS, or 1*MCS	CCS/GBT/NACS	
	Charging connector capacity	MCS: 1500A; CCS: 200A/250A/300A/375A/500A/600A; NACS: 200A/300A/380A/600A; GBT: 250A/500A/600A						
	Protection rating	IP55 (NEMA 3S)/IK10 (IK08 for 10.1" LCD, IK09 for 21.5" LCD)				IP55 (NEMA 3S)/IK10 (IK08 for 10.1" LCD)	IP65	
	Certification	TUV CE, cTUVus, RED, CB, FCC, OCA, NMI Eichrecht						
	Noise	0			55dB			0

Operating Environment

Operating temperature	-30°C~+70°C, full power output up to 50°C, power derating 5%/°C above 50°C
Transportation/Storage temperature	-40°C~+75°C
Relative humidity	≤95%RH, non-condensing
Altitude	3000m
Atmospheric pressure	80kPa~110kPa
Cabinet cooling	Air cooling

Standard

Charging standard	GBT 27930-2011/27930-2015, DIN70121, ISO15118, OCA
EMC/safety	EN 61851-21-2, EN 61000-6-4, EN 61000-6-2 Class A, EN 61851-1, EN 61851-23, EN 61851-24, UL 2202, CSA C22.2

*The product is continuously evolving. Please refer to the latest datasheet for specifications.