

EXP07K1E-FSW



6.2kW 750V Single Phase V2G/V2H DC Wallbox Charger



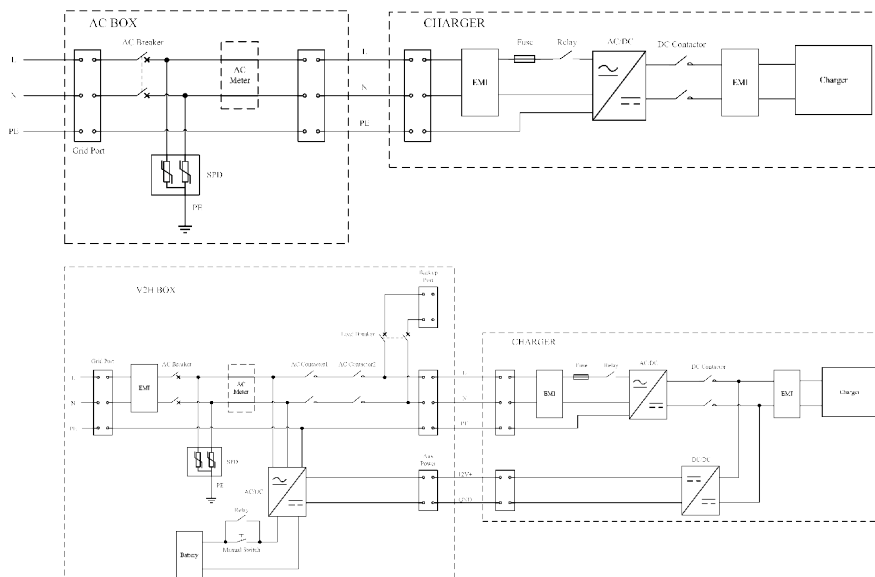
Introduction

EXP07K1E is the bidirectional 6.2kW DC wallbox designed for V2G/V2H applications. It connects the EV battery to the single phase AC grid to realize both EV charging/discharging for grid support (V2G function) and home power backup (V2H function). These V2G/V2H functions enable the EV battery to serve as a backup power supply and a smart grid node, contributing to energy efficiency and grid stability.

Main Features

- Inside high frequency transformer isolation to enhance safety
- Residential using with low noise, <60dB, EMC class B
- System efficiency is 94.5%
- WEB/APP Maintenance Backend System enhances the operation and maintenance effectiveness
- Low standby power consumption, less than 30W
- IP65

Application



Technical Parameters

		V2G Charger			
		EXP07K1E-FSW-C + IAU32AD-AW1	EXP07K1E-FSW-E + IAU32AD-AW1	EXP07K1E-FSW-C + IAU32AS-AW2	EXP07K1E-FSW-E + IAU32AS-AW2
Grid port	Voltage	230Vac±10% (L+N+PE)			
	Rated frequency	50Hz			
	Rated current	28.7A @on-grid charging ¹ 27A @on-grid discharging ¹			
	Max apparent power	6.2kVA @230Vac			
	Power factor range	≥0.99 @on-grid charging 0.8 leading-0.8 lagging @on-grid discharging & off-grid discharging			
	Instantaneous surge current during startup	≤110%I _n			
	Electrical segmentation capability	6kA			
	Short circuit current from charger	140A			
Backup port	Rated voltage	230Vac, 50Hz		\	
	Rated current	27A		\	
	Max current	32A		\	
	Rated output power	6.2kW		\	
	Instantaneous surge current during startup	≤110%I _n		\	
	Electrical segmentation capability	6kA		\	
	Short circuit current from charger	140A		\	
DC side	Voltage	300-500Vdc	300-750Vdc	300-500Vdc	300-750Vdc
	Connector type	CHAdeMO	CCS2	CHAdeMO	CCS2
	Electrical segmentation capability	5kA			
	DC rated current	20.7A @on-grid charging, 300V 22A @on-grid discharging, 300V 22A @off-grid discharging, according to load, 300V			
		Nominal power	6.2kVA @on-grid charging, 300V 6.6kVA @on-grid discharging, 300V 6.6kVA @off-grid discharging, 300V		
Maximum output fault current ²	Short circuit current from grid		6kA		
	Tripping time	1ms-10ms (max 10ms)			
Inverter topology	Isolated				
Standby power	≤30W				
System efficiency	94.5%				
EMC	Class B				
Noise	≤60dB (nominal input/output power, the environment temperature is 25°C)				
Environmental	Ambient temperature	-25°C-75°C (derating from 50°C) ³			
	Cooling method	Fan cooling			
	Altitude	≤2000m			
Place of installation	Indoor/outdoor unconditioned without solar effects ⁴				
IP rating	IP65				
Protective class	I				
Overvoltage category	DC: OVCII, AC: OVCIII				
Active anti-islanding method	Frequency shift				
Dimensions/weight	658mm(H)×340mm(W)×190mm(D)/≤23.5kg				
Optional	Model	IAU32AD-AW1 (V2H box)		IAU32AS-AW2 (AC box)	
	IP rating	IP55		IP55	
	Dimensions/weight	510mm(H)×305mm(W)×212mm(D)/≤15.5kg		230mm(H)×220mm(W)×100mm(D)/≤2.5kg	
	Pedestal	1755mm(H)×400mm(W)×400mm(D)/≤40kg			
Reliability and safety	Protection	IP65, IK10 for cabinet and IK08 for LCD			
	EMC	RED, EN61000-6-3/EN61000-6-1 Class B, IEC61851-21-2			
	Safety	TUV CE, EN 61851-1/EN 61851-23/EN 61851-24, IEC62477-1, IEC62909-1, IEC62909-2			
Grid connection	AS4777.2				
Made in PRC					

Note 1: The maximum current with V2H box is 32A (on charger).

Note 2: Grid port and backup port.

Note 3: The DC charger provides full output power up to 50°C, output power derating 5%/°C above 50°C.

Note 4: "Without solar effects" means that the inverter is installed in a location not subject to solar radiation.