# Alfen D'leteren -line

### **Specifications**

3 phase	✓
RFID card reader	✓
RGB LED	✓
Display	-
Energy meter	✓
Max. 6mA DC detection	✓
Mobile network communication	✓
Ethernet/LAN dedicated network connection	✓



### General product specifications

Number of outlets	1
Types of outlets	Fixed cable
	Type 2 socket, in accordance with IE62196-2
	Type 2 socket shutters, in accordance with IEC62196-2, ed. 2
Supported power systems	TN-S, TN-C-S, TT, IT *
Nominal output voltage (+/- 10%)	230V, 1-phase products
	400V (3x230V), 3-phase products
Maximum design current	32A per phase
Maximum design power	22kW, 3-phase products
Connection clamps	Cable gland, clamping range for 14-25.5mm cable thickness
	Cable clamps on input filter block. Range:
	· 10mm 2 per vein: solid (VD) wire
	· Max. 6mm 2 per vein: stranded (VDS) wire with ferrules
Activation relay	Integrated, simultaneous activation
	Extra safety relay in series
Overcurrent protection	Integrated in firmware; shutdown at: 105% after 1,000 seconds;
	110% after 100 seconds; 120% after 10 seconds; 150% after 2 seconds
Residual current protection	Integrated 6mA DC leakage current detection
	Response time: 1-5 seconds
Available in- and outputs	RJ45 (Ethernet/LAN)
	RJ11 (active load balancing)

### **Communication and protocols**

Controller	Central unit for charging currents and communication
Vehicle communication	Mode 3 in accordance with IEC 61851-1 ed. 3 (2017)
Internet/networking possibilities	Mobile network communication, Ethernet/LAN
Communication protocol Central System	OCPP 1.5 (JSON), OCPP 1.6 (JSON) `
Supported RJ45 protocols	OCPP
	TCP/IP
Supported RJ11 protocols	DSMR 4.0-4.2 and SMR5.0 (P1 port)
	I/O for supporting external relay
Modbus (Master)	TCP/IP

## Alfen EDI-line



### Information safety

SIM card	Mini SIM card
	APN username and password
Central System authentication	TLS 1.2 x509 2048/4096 bit root certificate
EVSE authentication	HTTP Basic authentication, with or without TLS
Remote console access (SSH, telnet)	Not supported
Diagnostic files	Encryption: AES 128 bit
Firmware update files	Encrypted and digitally signed
	Encryption: SHA256 hash (pkcs1/PSS padding with 2048 RSA key)
	Signature: RSA public key 2048 bit
EVSE Interal Flash	AES 128 bit (erased when read)
Root certificate	Installed in the factory, update through UpdateFirmwire file

### Available memory

Charge passes	Local list: approx. 800 charge passes (via the Backend)
	White list: approx. 1,200 charge passes (local)
Transaction database	Approx. 1,500 transactions (of 4u with 15min Wh-metering values)
Logging for diagnostics	Approx. 45,000 lines

#### **User circumstances**

Operating temperature Relative	-25°C - 40°C
atmospheric humidity Electrical	5 - 95 %
safety class	1
Degree of protection (casing) IK	IP55
protection (mechanical impact)	IK10
Stand-by use	Approx. 3.5 - 3.8W

Casing	Wall-mounted unit
Type Mounting	Wall mounting or mounting post (accessory)
options Material	Polycarbonate, UV resistant and flame retardant
Colour	Grey
Locking	Torx T20 screws
Dimensions (H x W x D)	370 x 240 x 130mm
Casing Packaging (models with socket)	460 x 315 x 250mm
Packaging (models with charging cable)	480 x 340 x 360mm
Weight	
Casing	Approx. 4 kg
Total, incl. packaging	Approx. 4.5 kg

