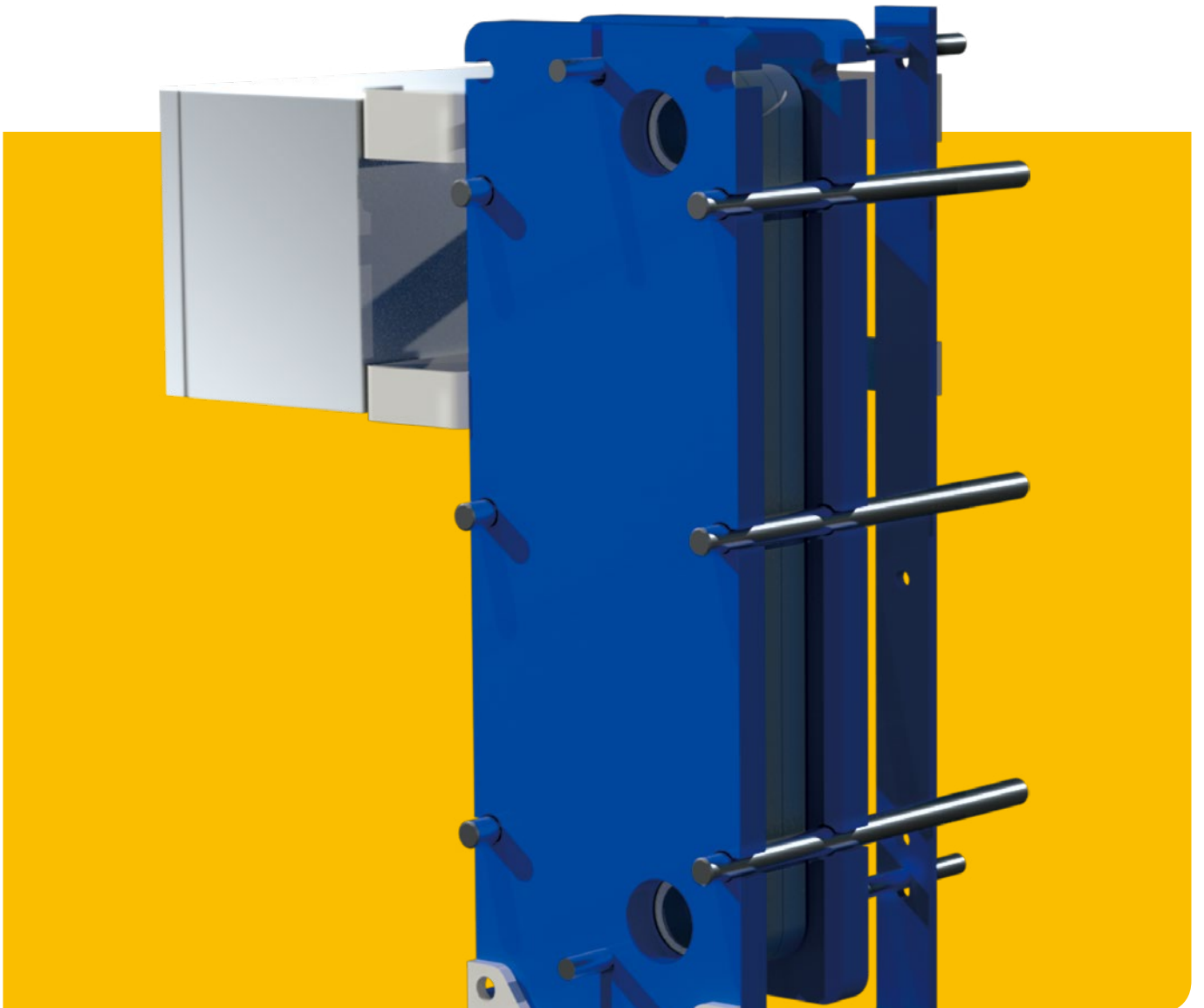


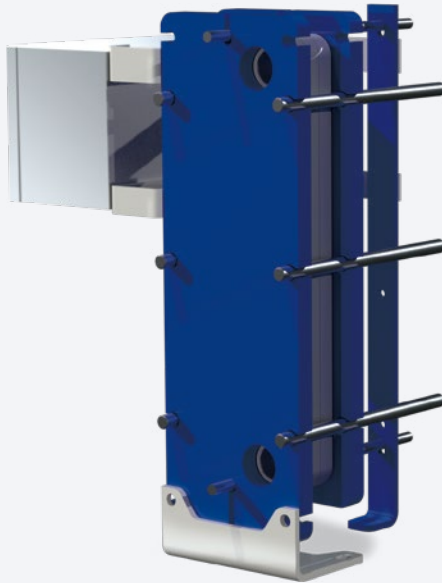
# Electric Heater

ELPHE / ELBLK Series

Create Customer Value  
through Innovative System Engineering



# Electric Heater



**ELPHE**  
Electric Plate  
Heat Exchanger

**ELBLK**  
Electric Block  
Heater



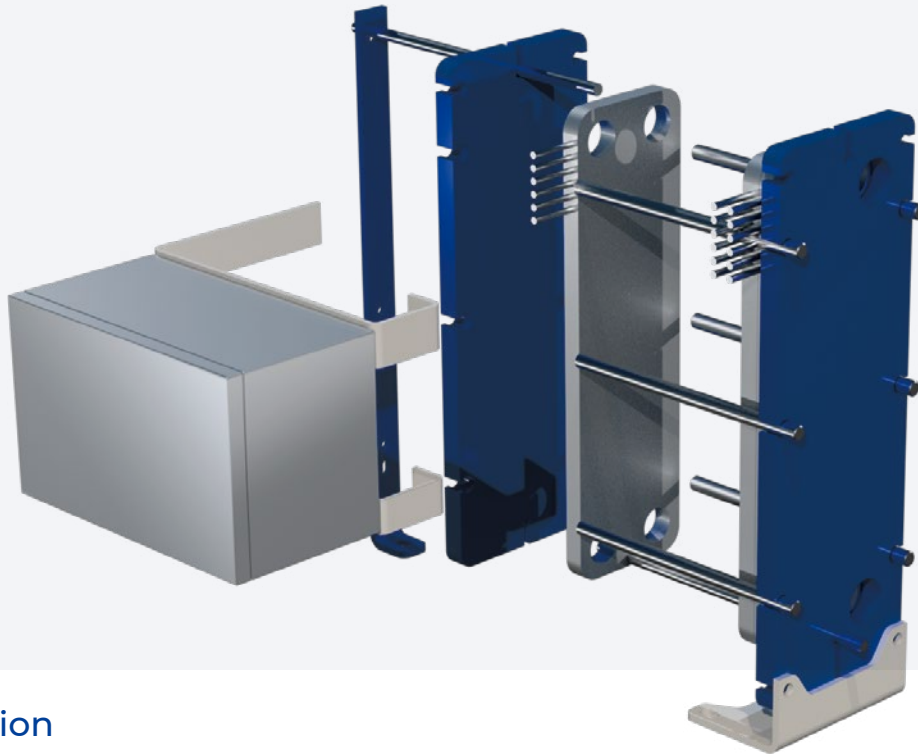
MnSi ELPHE has been developed to overcome shortcomings of the conventional shell & tube heat exchanger – high efficiency with miniaturization. It is capable of heating by 15kW per one electric aluminum plate with high thermo convective.

**Benefits** • Compact design and safety control

**Quality** • In addition to the control and protection on piping line, Safety system is functioned by backup of thermal couple directly inserted into the inside of electric plate  
• As ELPHE is designed with fully enclosed structure, no leakage and explosion can be assured even in abnormal condition. On the contrary, invasion of the external explosive gas can be prevented by openings and surfaces(EX II B T4 Approved and certified)  
• ELPHE is patented under MnSi

**Application** • Diesel engine fuel oil/Diesel engine, turbine and compressor lubricating oil/Miller, driller and lathe cutting oil/Chemical process/Sea water, raw water etc in Power and Marine Application

# ELPHE Electric Plate Heat Exchanger



## Specification

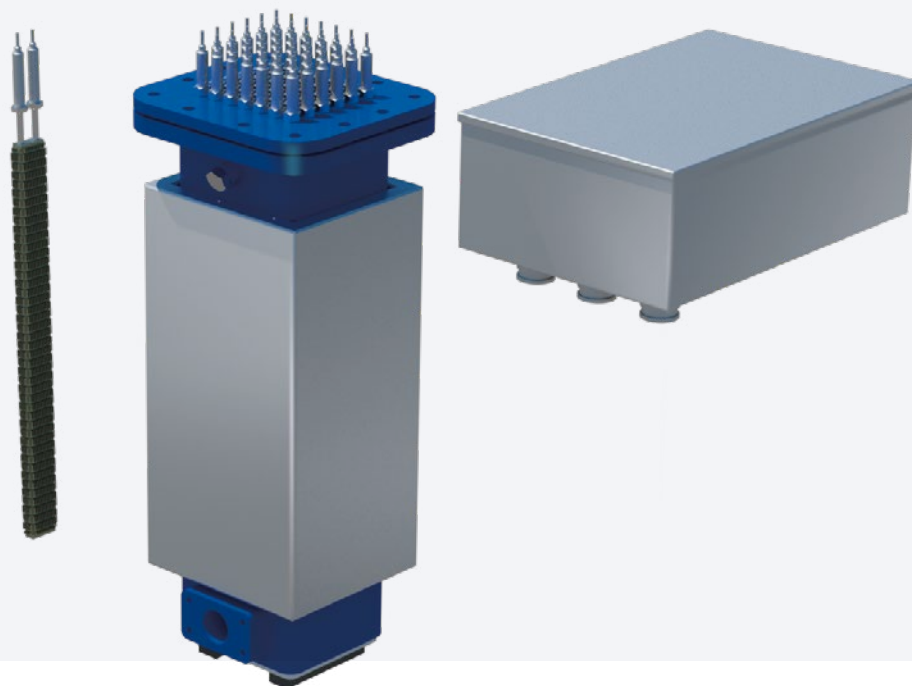
Body	
Material	SS400 or Equivalent ASTM
Connection	DIN, ANSI, JIS, KS all other STD
Volume Flow	Max. 15m <sup>3</sup> /h
Weight / Dimension	75kg / 800 × 300 × 650

Electric Plate	
Material	AC4C or Equivalent ASTM
Heat Transfer Area	0.22 m <sup>2</sup> / PC
Power Capacity	15kW / 480V
Heating Element	Silicon Coated Magnesia
Application	Lub. Oil, Fuel Oil, Water, Etc.
Operating Temperature	-10°C ~ 160°C
Working / Test Pressure	16 bar / 24 bar

Junction Box	
Material	SS400 or Equivalent ASTM
Paint	RAL 7032
Cable Grand	PG25 / 35

Model	Max. Temp. / Press.	Max. Operating Power	Dimension	Connections
ELPHE02	180°C / 16 bar	45kW(9 Block)	350(h) × 105(w)mm	25A
ELPHE08	180°C / 16 bar	225kW(15 Block)	640(h) × 187(w) mm	50A

# ELBLK Electric Block Heater



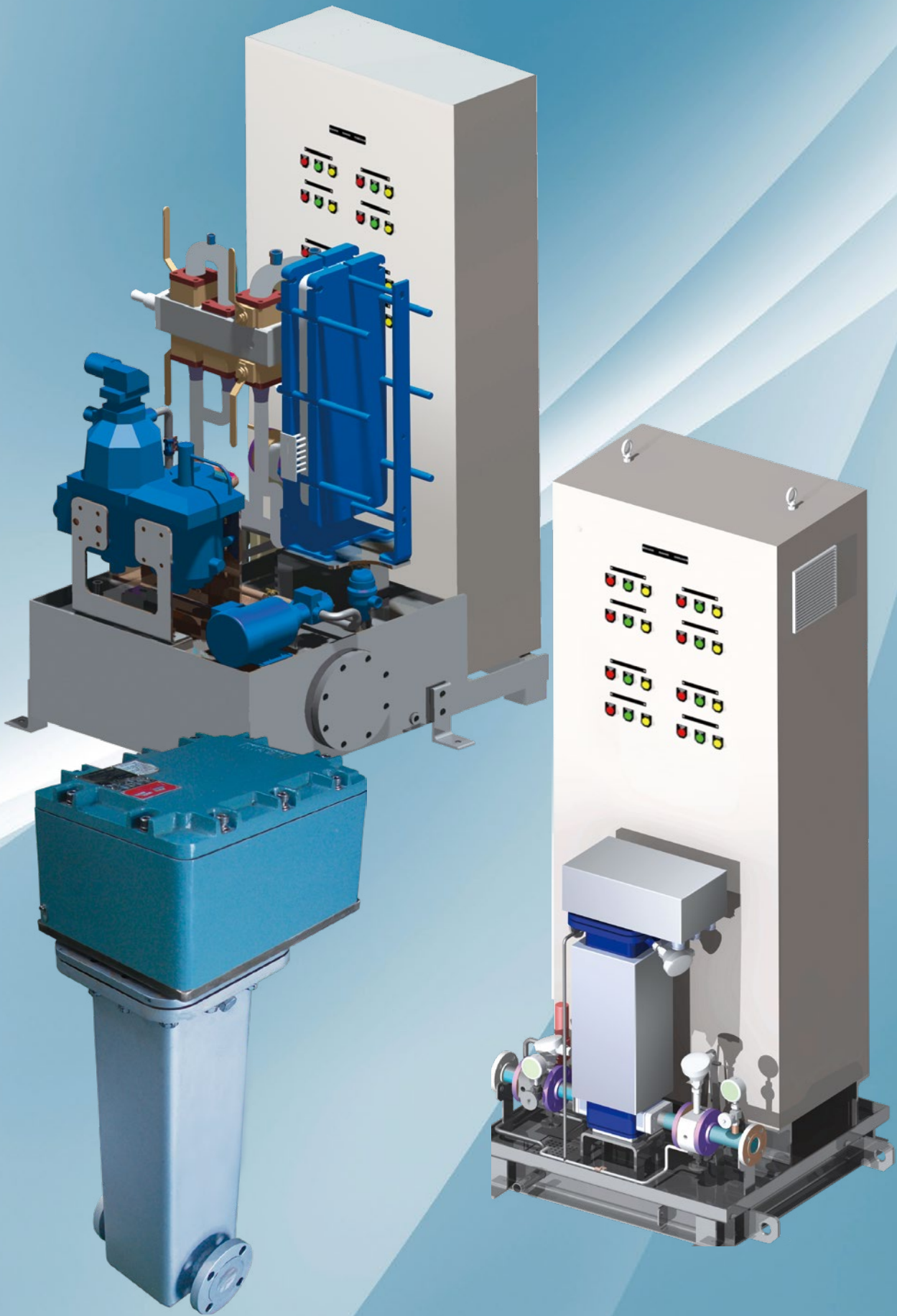
## Specification

Body	
Material	SS400 or Equivalent ASTM
Connection	MNSI Special 25A
Volume Flow	Max. 15m <sup>3</sup> /h
Weight / Dimension	40kg / 600 × 300 × 200

Electric Plate	
Material	AC4C or Equivalent ASTM
Heat Transfer Area	0.18m <sup>2</sup> / PC
Power Capacity	5kW / 480V
Heating Element	Silicon coated magnesia
Application	Lub. Oil, Fuel Oil, Water, Etc.
Operating Temperature	-10°C ~ 160°C
Working / Test Pressure	16 bar / 24 bar

Junction Box	
Material	SS400 or Equivalent ASTM
Paint	RAL 7032
Cable Grand	PG25 / 35

Model	Max. Temp. / Press.	Max. Operating Power	Dimension	Connections
ELBLK	180°C / 16 bar	150kW	Min.3 ~ Max.30	SQUARE 25A / 50A





Scan QR Code  
with a Smartphone

[www.mnsi.co.kr](http://www.mnsi.co.kr)



**MnSi Co., Ltd.**

138, Jayumuyeok 5-gil, Masanhoewon-gu,  
Changwon-si, Gyeongsangnam-do, Republic of Korea

**T** +82-55-237-0606

**F** +82-55-237-3030

**E** [sales@mnsi.co.kr](mailto:sales@mnsi.co.kr)

**W** [www.mnsi.co.kr](http://www.mnsi.co.kr)

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