

Mars Series (Air-cooling) PCS Module

Mars-100KT/110KT/125KT

Features

-  Three-level topology with up to 98.9% conversion efficiency
-  Supports stable operation under weak grid conditions
-  Advanced grid-forming interconnection technology
-  Supports AC coupling of up to 32 units
-  Supports SVG function



	Mars-100KT	Mars-110KT	Mars-125KT
DC side			
Maximum DC voltage	1000V	1000V	1000V
Minimum DC voltage	580V	580V	580V
DC voltage operating range	580~1000V	580~1000V	580~1000V
Maximum current on DC side	173A	190A	216A
AC side(on-grid)			
Rated charge/discharge power	100kW	110kW	125kW
Maximum charge/discharge power	120kW	132kW	150kW
Rated charge/discharge current	145A	160A	182A
Maximum charge/discharge current	174A	192A	217A
Rated grid voltage	400V	400V	400V
Grid voltage range	300~460V	300~460V	300~460V
Rated grid frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
THDi	<3%(at rated power)	<3%(at rated power)	<3%(at rated power)
Power factor	>0.99	>0.99	>0.99
Power factor range	-1~1	-1~1	-1~1
Over load capacity	1.2Pn for 1minute	1.2Pn for 1minute	1.2Pn for 1minute
AC side(off-grid)			
Rated output voltage	400V	400V	400V
Voltage deviation	±2%	±2%	±2%
THDu	<3%(linear load)	<3%(linear load)	<3%(linear load)
Efficiency			
Maximum efficiency	98.9%	98.9%	98.9%
Protection			
DC reverse connection protection	Yes	Yes	Yes
AC short circuit protection	Yes	Yes	Yes
AC output over current protection	Yes	Yes	Yes
Surge protection	Type II	Type II	Type II
Insulation impedance monitoring	Yes	Yes	Yes
Temperature protection	Yes	Yes	Yes
Basic parameters			
Dimensions (H*W*D)	220mmx444mmx720mm	220mmx444mmx720mm	220mmx444mmx720mm
Weight	58kg	58kg	58kg
Topology	Transformerless	Transformerless	Transformerless
Ambient	-40~+60°C	-40~+60°C	-40~+60°C
IP rating	IP20	IP20	IP20
Cooling mode	Intelligent air cooling	Intelligent air cooling	Intelligent air cooling
Maximum working altitude	4,000m(>3,000m,derated)	4,000m(>3,000m,derated)	4,000m(>3,000m,derated)
Characteristic			
DC port	OT terminal	OT terminal	OT terminal
AC port	OT terminal	OT terminal	OT terminal
Display	LED	LED	LED
Communication mode	Ethernet, RS485, CAN	Ethernet, RS485, CAN	Ethernet, RS485, CAN
Certificate			
EN/IEC 62477-1, EN/IEC 61000-6-2, EN/IEC 61000-6-4, EN 50549-1, EN 50549-10, G99/1-10/03.24, VDE-AR-N 4105, VDE-AR-N 4110, VDE-AR-N 4120, NRS 097-21-1, NTS631, UNE 217001, UNE 217002			

Mars Series (Liquid-cooling) PCS Module

Mars-100KT/110KT/125KT-LP

Features

-  Adapt to various harsh environments
-  Supports SVG function
-  Noise < 60 dB
-  IP 66



Mars-100KT-LP

Mars-110KT-LP

Mars-125KT-LP

DC side

Maximum DC voltage	1000V	1000V	1000V
Minimum DC voltage	580V	580V	580V
DC voltage operating range	580~1000V	580~1000V	580~1000V
Maximum current on DC side	173A	190A	216A

AC side(on-grid)

Rated charge/discharge power	100kW	110kW	125kW
Maximum charge/discharge power	120kW	132kW	150kW
Rated charge/discharge current	145A	160A	182A
Maximum charge/discharge current	174A	192A	217A
Rated grid voltage	400V	400V	400V
Grid voltage range	300~460V	300~460V	300~460V
Rated grid frequency	50Hz/60Hz	50Hz/60Hz	50Hz/60Hz
THDi	<3%(at rated power)	<3%(at rated power)	<3%(at rated power)
Power factor	>0.99	>0.99	>0.99
Power factor range	-1~1	-1~1	-1~1
Over load capacity	1.2Pn for 1minute	1.2Pn for 1minute	1.2Pn for 1minute

AC side(off-grid)

Rated output voltage	400V	400V	400V
Voltage deviation	±2%	±2%	±2%
THDu	<3%(linear load)	<3%(linear load)	<3%(linear load)

Efficiency

Maximum efficiency	98.9%	98.9%	98.9%
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Protection

DC reverse connection protection	Yes	Yes	Yes
AC short circuit protection	Yes	Yes	Yes
AC output over current protection	Yes	Yes	Yes
Surge protection	Type II	Type II	Type II
Insulation impedance monitoring	Yes	Yes	Yes
Temperature protection	Yes	Yes	Yes

Basic parameters

Dimensions (H*W*D)	245mmx505mmx850mm	245mmx505mmx850mm	245mmx505mmx850mm
Weight	78kg	78kg	78kg
Topology	Transformerless	Transformerless	Transformerless
Ambient	-40~+60°C	-40~+60°C	-40~+60°C
IP rating	IP66	IP66	IP66
Cooling mode	Liquid Cooling	Liquid Cooling	Liquid Cooling
Maximum working altitude	4,000m(>3,000m,derated)	4,000m(>3,000m,derated)	4,000m(>3,000m,derated)

Characteristic

DC port	Plug-in Terminal	Plug-in Terminal	Plug-in Terminal
AC port	Plug-in Terminal	Plug-in Terminal	Plug-in Terminal
Display	LED	LED	LED
Communication mode	Ethernet, RS485, CAN	Ethernet, RS485, CAN	Ethernet, RS485, CAN

Certificate

EN/IEC 62477-1, EN/IEC 61000-6-2, EN/IEC 61000-6-4, EN 50549-1, EN 50549-10, G99/1-10/03.24, VDE-AR-N 4105, VDE-AR-N 4110, VDE-AR-N 4120, NRS 097-21-1, NTS631, UNE 217001, UNE 217002