



Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer	Schneider Electric Industries SAS
Address	35 RUE JOSEPH MONIER, RUEIL MALMAISON, 92500, France
Place of Production	Schneider Electric Alpes ZI Alpespace, Voie Isaac Newton, Francin, 73800, France
Place of Production	SCHNEIDER SHANGHAI POWER DISTRIBUTION ELEC. APP. CO LTD 833 Kang Qiao Road Pudong Area, Shanghai, 201315, China
Place of Production	Schneider Electric France Mastertech 70 Rue de la Grange Batie, Z.I. Centr'Alp, Moirans, 38430, France
Place of Production	Schneider Electric India Pvt Ltd. Survey No. 215, Gagillapur Village, Medak Road, Rangareddy District, Hyderabad, 500043, India
Type	Circuit Breakers (Env Tested)
Description	Air circuit breaker (ACB), 3 & 4 pole, fixed and draw-out type, equipped with Micrologic X control-units. MTZ1 06/08/10/12/16 H1 MTZ1 06/08/10/12/16 H2 MTZ1 06/08/10/12/16 H3 MTZ1 06/08/10 L1

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Matthias Karg

Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Type Approval Certificate

MTZ2 08/10/12/16/20 N1
MTZ2 08/10/12/16/20/25 N2
MTZ2 08/10/12/16/20/25/32/40 H1
MTZ2 08/10/12/16/20/25/32/40 H1b
MTZ2 08/10/12/16/20/25/32/40 H2
MTZ2 20/25/32/40 H3
MTZ2 08/10/12/16/20 L1

MTZ3 40/50/63 H1
MTZ3 40/50/63 H2

For detailed product description, pls. refer to appendix.

Trade Name	MasterPact MTZ1, MTZ2, MTZ3
Application	Marine, Offshore and Industrial applications for use in environmental categories ENV1, ENV2 and ENV3, as defined in Lloyd's Register Type Approval System, Test Specification Number 1 – December 2021. Suitable for use in general power distribution zone only.
Specified Standard	IEC 60947-1: 2007 + A1: 2010 + A2: 2014 IEC 60947-2: 2016 + A1: 2019 IACS UR E10 Rev. 8 / 2021
Ratings	Rated insulation voltage U_i : 1000 V Rated impulse withstand voltage U_{imp} : 12 kV Rated current I_n : 630 to 6300 A Rated operational voltage U_e : 220 to 690 VAC Rated frequency: 50/60 Hz No. of poles: 3 or 4 Power supply of control unit: 24 VDC

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

Lloyd's Register Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'Lloyd's Register'. Lloyd's Register assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant Lloyd's Register entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.



Type Approval Certificate

MicroLogic 2.0 X (firmware version 004.000.000 or greater)
MicroLogic 5.0 X (firmware version 004.000.000 or greater)
MicroLogic 6.0 X (firmware version 004.000.000 or greater)

For detailed ratings, pls. refer to appendix.

Other Conditions

Derating for ambient temperature above 40 °C according to manufacturer's derating table.

Assembly of MasterPact MTZ can also be carried out in further Schneider Electric Industries - Local Adaption Centers acc. to manufacturer's declaration "MasterPact MZT_industrial organization and factory audit_2022-03-15.pdf"

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: 17/20083 (E1)

The Design Appraisal Document HPC1762044-22/MK and its supplementary Type Approval Terms and Conditions form part of this Certificate.



Appendix

DESCRIPTION

Air circuit breakers (ACB), fixed and draw-out type, equipped with Micrologic X control-units.

MasterPact MTZ ①②③

- ① Frame size
1, 2, 3
- ② Current rating (x100)
06 630 A
08 800 A
10 1000 A
12 1250 A
16 1600 A
20 2000 A
25 2500 A
32 3200 A
40 4000 A
50 5000 A
63 6300 A
- ③ Performance level
N1, N2: indicates Normal type
H1, H1b, H2, H3: indicates Heavy duty types
L1: indicates current Limiting type

RATINGS

General characteristics

		MTZ1				MTZ2						MTZ3		
		H1	H2	H3	L1	N1	N2	H1	H1b	H2	H3	L1	H1	H2
Rated current (max)	In (A)	1600			1000	2000	2500	4000				2000	6300	
Frequency	f (Hz)	50/60				50/60						50/60		
Degree of pollution		3				3						3		
Impulse withstand voltage	Uimp (kV)	12				12						12		
Rated insulation voltage	Ui (V)	1000				1000						1000		
Rated operational voltage(max)	Ue (Vac)	690	440	525		690						690		



RATINGS (continued)

Currents ratings

		Rated Current In (A) at 40 °C											
		MTZ	06	08	10	12	16	20	25	32	40	50	63
Type													
MTZ1	H1		630	800	1000	1250	1600	-	-	-	-	-	-
	H2		630	800	1000	1250	1600	-	-	-	-	-	-
	H3		630	800	1000	1250	1600	-	-	-	-	-	-
	L1		630	800	1000	-	-	-	-	-	-	-	-
MTZ2	N1		-	800	1000	1250	1600	2000	-	-	-	-	-
	N2		-	800	1000	1250	1600	2000	2500	-	-	-	-
	H1		-	800	1000	1250	1600	2000	2500	3200	4000	-	-
	H1b		-	800	1000	1250	1600	2000	2500	3200	4000	-	-
	H2		-	800	1000	1250	1600	2000	2500	3200	4000	-	-
	H3		-	-	-	-	-	2000	2500	3200	4000	-	-
	L1		-	800	1000	1250	1600	2000	-	-	-	-	-
MTZ3	H1		-	-	-	-	-	-	-	-	4000	5000	6300
	H2		-	-	-	-	-	-	-	-	4000	5000	6300



RATINGS (continued)

Electrical characteristics acc. to IEC 60947-2

	Type	Rated current In [A] at 40 °C	Rated voltage Ue [VAC]	Breaking capacity ⁽¹⁾		Withstand capacity Icw [kA]		Utilisation category
				Icu [kA]	Ics [kA]	1s	3s	
MTZ1	H1	630 - 1600	220/415/440 525 690	42	42	42	24	B
	H2			50	50	42	24	B
	H3		42	42	42	24	B	
	L1	630 - 1000	220/415 440 525	150 130 100	150 130 100	-	-	A
MTZ2	N1	800 - 2000	220/415/440 525 690	42	42	42	22	B
	N2	800 - 2000	220/415/440 525 690	50	50	50	-	B
		2500		50	50	50	-	B
	H1	800 - 2000	220/415/440 525 690	66	66	66	36	B
		2500 - 4000		66	66	66	66	B
	H1b	800 - 4000	220/415/440 525 690	85	85	85	-	B
	H2	800 - 1600	220/415/440 525 690	100	100	85	50	B
		2000 - 4000		85	85			
					100	100	85	75
	H3	2000 - 4000	220/415/440 525 690	150 130 100	150 130 100	65	65	B
L1	800 - 2000	220/415/440 525 690	150 130 100	150 130 100	30	30	B	
MTZ3	H1	4000 - 6300	220/415/440 525 690	100	100	100	100	B
	H2			150 130 100	150 130 100	100	100	B

for power factor 0.2/0.25 (I > 50 kA = 0.2; I ≤ 50 kA = 0.25)