

MERLIN GERIN

Masterpact™
universal power
breaker
250 to 6300 A



mastering electrical power



MERLIN GERIN

Masterpact™, the universal power breaker

Merlin Gerin, a world leader in power air circuit-breakers, introduces the "universal power breaker": Masterpact™. This new line replaces the complete Merlin Gerin air circuit-breaker line, combining the advantages of the air and insulated breakers. Masterpact™ is a universal circuit-breaker designed:

- to meet all the major world standards,
- to be used in all types of applications: industrial, marine, commercial, nuclear power plants...
- to replace air and insulated breakers bringing new standards of performances and features,
- to be installed worldwide in all climatic conditions.

single design up to 6300 A

All frame sizes have been designed with the same technology featuring a single depth and door cutout, common control units and accessories.

high short time current rating: up to 100 kA for 1 sec.

The exceptional short time ratings of 65,000 A on a 3000 A frame, 100,000 A on 4000 A and above frames allow Masterpact™ to be fully selective up to its interrupting rating.

100% rated

Masterpact™ circuit-breakers are designed for continuous operation at 100% of their current rating as permitted by the NEC (UL listing applies up to 3000 A).

self-contained drawout

All the features of a drawout power circuit-breaker are integrated in Masterpact™: protection, isolation, testing, interchangeability, maintenance.

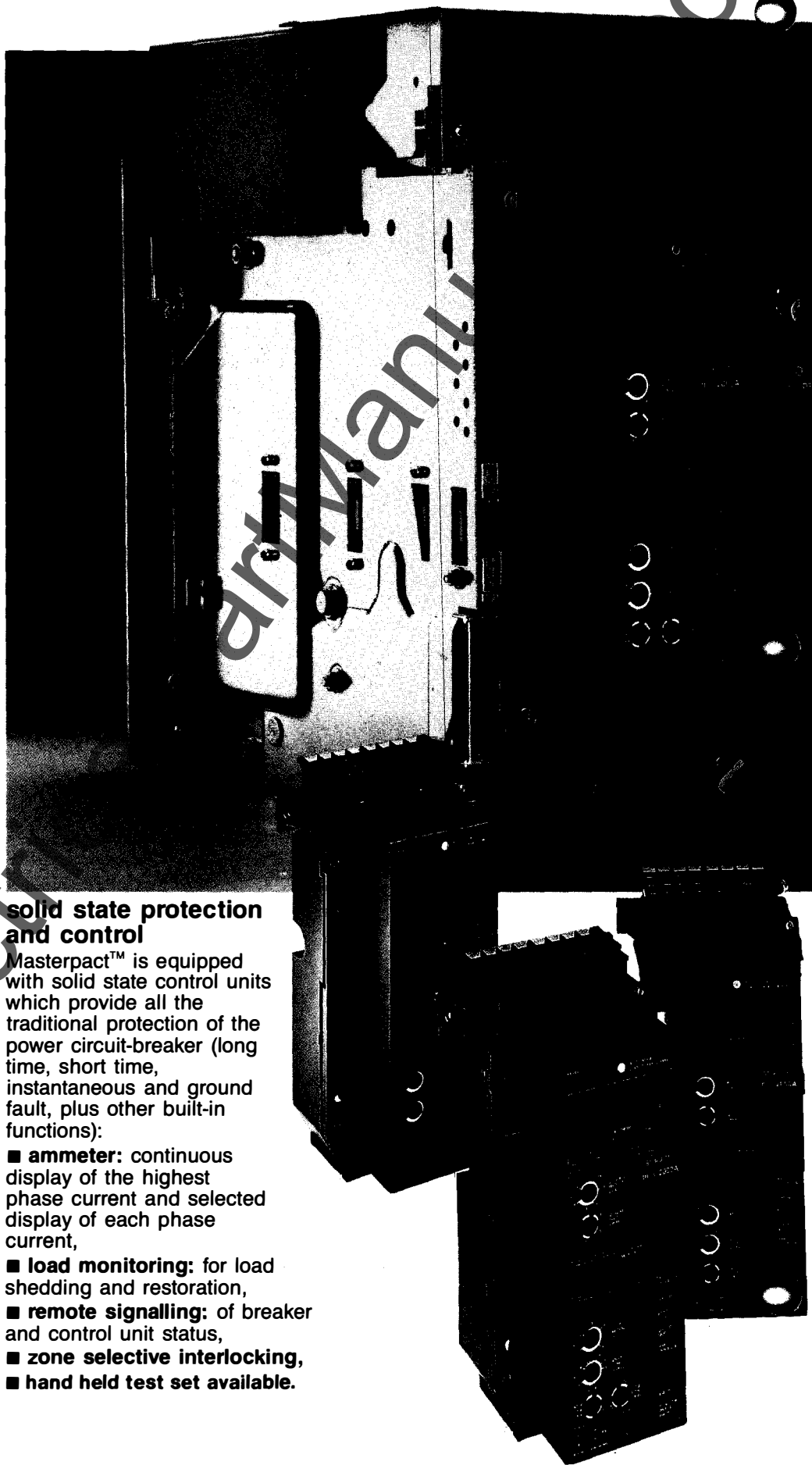
true 2-step stored energy mechanism

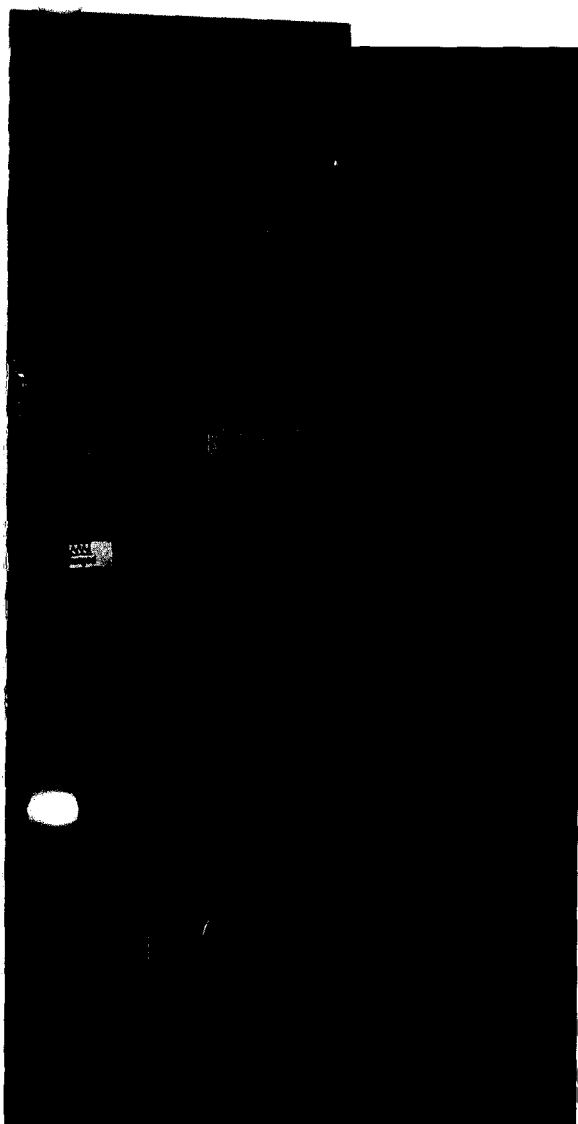
Closing time less than 5 cycles. Masterpact™ circuit-breaker is operated via a stored energy mechanism for instantaneous closing and opening.

solid state protection and control

Masterpact™ is equipped with solid state control units which provide all the traditional protection of the power circuit-breaker (long time, short time, instantaneous and ground fault, plus other built-in functions):

- **ammeter:** continuous display of the highest phase current and selected display of each phase current,
- **load monitoring:** for load shedding and restoration,
- **remote signalling:** of breaker and control unit status,
- **zone selective interlocking,**
- **hand held test set available.**





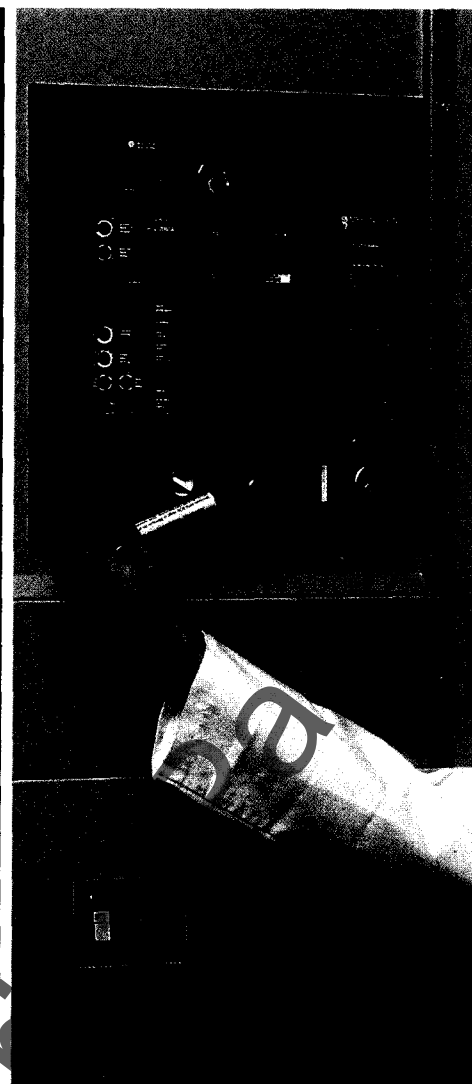
designed for reduced maintenance

■ **simpler design**

The simpler design of Masterpact™ allows a great reduction in the number of parts enhancing reliability and maintenance reduction.

■ **contact wear indicator**

Main contacts and their wear indicators are easily accessible after removing the arc chute.



drawout breaker design

The drawout assembly mechanism allows the breaker to be racked in the 4 positions (connected, test, disconnected and withdrawn). Closing and opening push buttons, racking handle and racking mechanism are accessible through the front door cutout. Disconnecting the breaker will be therefore possible without opening the door and accessing live parts. Safety shutters can be provided to protect from live parts when the breaker is removed.



extended flexibility on site

To permit installation changes, Masterpact™ can be modified without returning it to the factory. All auxiliary devices are common for the entire Masterpact™ line and are simply field installable with a screwdriver.

front connection of secondary circuits

All accessory terminals are located on a connecting block which is accessible from the front. This is particularly useful for field adaptation.

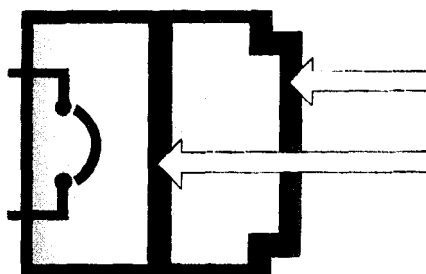
improved safety

■ **isolation function by positive indication of contact status**

The mechanical indicator is truly representative of all three main contacts.

■ **reinforced insulation**

Two insulation barriers separate the front of the circuit-breaker from the main circuits.



■ **segregated compartment**

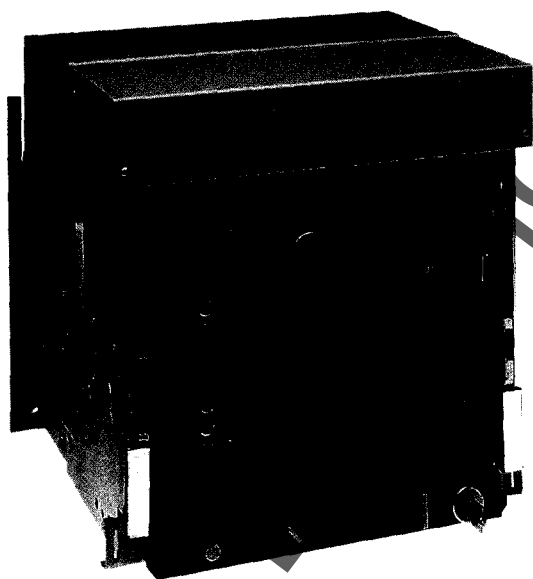
Once the front cover has been removed, leaving access to the auxiliary compartment, the main circuits remain fully insulated. Furthermore, interphase partitioning allows full insulation between each pole even with breaker front cover removed.



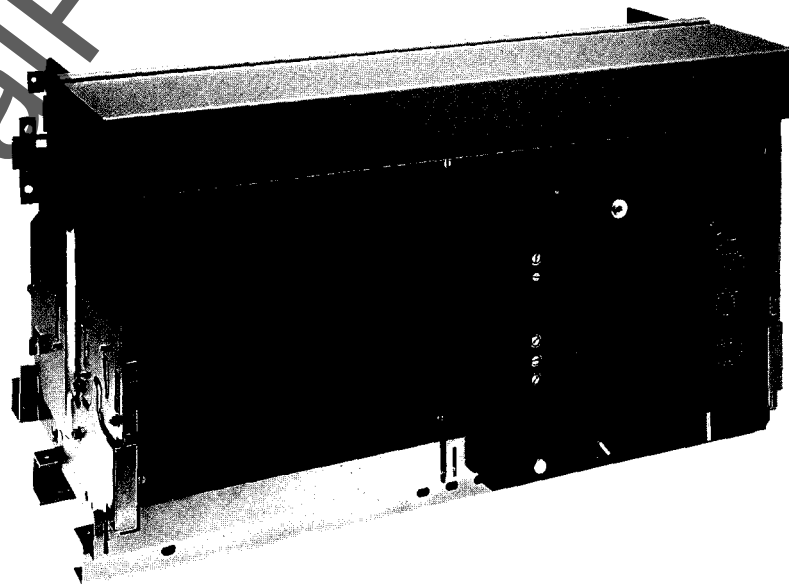
**a complete 600 V
universal power breaker line
from 250 to 6300 A**

type	ampere frame (A)	sensor range (A)	interrupting ratings			short time rating (A) (1 sec)*	dimensions		
			RMS Sym. Amps 240 V	480 V	600 V		H	W	D
special interrupting rating (N1)									
MP 08N1	800	250-800	42,000	42,000	42,000	42,000	17 1/4	17 1/8	14 1/2
standard interrupting rating (H1)									
MP 08H1	800	250-800	50,000	50,000	50,000	50,000	17 1/4	17 1/8	14 1/2
MP 12H1	1200	800-1200	65,000	65,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 16H1	1600	1200-1600	65,000	65,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 20H1	2000	1600-2000	65,000	65,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 25H1	2500	2000-2500	65,000	65,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 30H1	3000	2500-3000	65,000	65,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 40H1	4000	2500-4000	100,000	100,000	100,000	100,000	19 1/16	32 1/8	14 1/2
MP 50H1	5000	4000-5000	100,000	100,000	100,000	100,000	19 1/16	32 1/8	14 1/2
MP 63H1	6300	5000-6300	100,000	100,000	100,000	100,000	19 1/16	41 3/16	14 1/2
high interrupting rating (H2)									
MP 08H2	800	250-800	100,000	100,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 12H2	1200	800-1200	100,000	100,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 16H2	1600	1200-1600	100,000	100,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 20H2	2000	1600-2000	100,000	100,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 25H2	2500	2000-2500	100,000	100,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 30H2	3000	2500-3000	100,000	100,000	65,000	65,000	17 1/4	17 1/8	14 1/2
MP 40H2	4000	2500-4000	150,000	150,000	100,000	100,000	19 1/16	32 1/8	14 1/2
MP 50H2	5000	4000-5000	150,000	150,000	100,000	100,000	19 1/16	32 1/8	14 1/2
MP 63H2	6300	5000-6300	150,000	150,000	100,000	100,000	19 1/16	41 3/16	14 1/2

* IEC rating, same rating for UL 0.5 sec.



MP 30H2 3000 A
drawout mounted with ST408S control unit



MP 50H2 5000 A
drawout mounted with ST318ST control unit

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As standard specifications and designs change
from time to time, please ask for confirmation of
the information given in this publication.