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Eaton 197345

Eaton Moeller® series P1 On-Off switch, P1, 25 A, 3 pole + N, surface mounting, with black thumb grip and front plate, in steel enclosure

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PRODUCT NAME	Eaton Moeller® series P1 On-off switch
CATALOG NUMBER	197345
PRODUCT LENGTH/DEPTH	200 mm
PRODUCT HEIGHT	127 mm
PRODUCT WIDTH	150 mm
PRODUCT WEIGHT	1.675 kg
CERTIFICATIONS	VDE 0660 IEC/EN 60947 IEC/EN 60204 IEC/EN 60947-3



PRODUCT CATEGORY	On-Off switch
FEATURES	Version as maintenance- /service switch
ACTUATOR COLOR	Black
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 SHORT-CIRCUIT RATING	ls the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT	Meets the product standard's requirements.
10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	UV resistance only in connection with protective shield.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
10.3 DEGREE OF PROTECTION OF	Does not apply, since the entire switchgear needs to

DECLARATIONS OF CONFORMITY	eaton-on-off-switch- declaration-of-conformity- uk251288en.pdf
00000	<u>IL008054ZU</u>
000	eaton-rotary-switches-on- off-switch-p3-main-switch- wiring-diagram-002.eps
	eaton-rotary-switches-t0- main-switch-dimensions- 003.eps
00	eaton-rotary-switches-t0- changeover-switch-3d- drawing.eps
	eaton-rotary-switches- front-plate-t0-on-off- switch-symbol-002.eps

ASSEMBLIES	be evaluated.
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be evaluated.
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to be evaluated.
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	ls the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	ls the panel builder's responsibility.
10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH	ls the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	ls the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	ls the panel builder's responsibility.
FITTED WITH:	Black thumb grip and front plate
OPERATING FREQUENCY	1200 Operations/h
POLLUTION DEGREE	2
POLLOTION DEGREE	3
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	6000 V AC
RATED IMPULSE WITHSTAND VOLTAGE	
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT	6000 V AC
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT	6000 V AC 25 A
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED	6000 V AC 25 A 25 A
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU)	6000 V AC 25 A 25 A 25 A
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) SWITCHING ANGLE SWITCHING POWER AT	6000 V AC 25 A 25 A 25 A 90 °
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) SWITCHING ANGLE SWITCHING POWER AT 400 V VOLTAGE PER CONTACT	6000 V AC 25 A 25 A 25 A 90 ° 11 kW
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) SWITCHING ANGLE SWITCHING POWER AT 400 V VOLTAGE PER CONTACT PAIR IN SERIES	6000 V AC 25 A 25 A 25 A 90 ° 11 kW 60 V Auxiliary contact fitted by
RATED IMPULSE WITHSTAND VOLTAGE (UIMP) RATED PERMANENT CURRENT AT AC-21, 400 V RATED PERMANENT CURRENT AT AC-23, 400 V RATED UNINTERRUPTED CURRENT (IU) SWITCHING ANGLE SWITCHING POWER AT 400 V VOLTAGE PER CONTACT PAIR IN SERIES ACCESSORIES	6000 V AC 25 A 25 A 25 A 90 ° 11 kW 60 V Auxiliary contact fitted by user. Complete device in

TUATOR TYPE BIENT OPERATING MPERATURE ICLOSED) - MAX BIENT OPERATING MPERATURE ICLOSED) - MIN MBER OF AUXILIARY NTACTS (CHANGE- ER CONTACTS) TED CONDITIONAL ORT-CIRCUIT CURRENT) ERVOLTAGE TEGORY NTROL CIRCUIT JABILITY MBER OF PROTECTION ONT SIDE) MBER OF POLES DUNTING METHOD GREE OF PROTECTION ORTS Surface mounting MBER OF SWITCHES THERE OF ROTECTION ONE SURFACE MAY MAY TERMINAL TO SURFACE MAY TERMINAL ALONG TO SURFACE MAY TO SURFACE MAY TERMINAL TO SHORT SURFACE MAY TO SHORT SURFACE MAY TERMINAL TO SHORT SURFACE TO SHORT SURFA	MOUNTING BOSITION	
BIENT OPERATING MPERATURE ICLOSED) - MAX BIENT OPERATING MPERATURE ICLOSED) - MIN MBER OF AUXILIARY NTACTS (CHANGE- ER CONTACTS) MBER OF AUXILIARY NTACTS (NORMALLY OSED CONTACTS) TED CONDITIONAL ORT-CIRCUIT CURRENT) ERVOLTAGE TEGORY III T failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) IP65 MBER OF PROTECTION ONT SIDE) MBER OF POLES DUNTING METHOD Surface mounting MEER OF PROTECTION ORT SUBJE MBER OF SWITCHES T 440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Half- sinusoidal shock 20 ms ESPAN, MECHANICAL AD RATING AD C C C C C C C C C C C C C	MOUNTING POSITION	As required
MPERATURE ICLOSED) - MAX BIENT OPERATING MPERATURE ICLOSED) - MIN MBER OF AUXILIARY NTACTS (CHANGE- ER CONTACTS) MBER OF AUXILIARY NTACTS (NORMALLY OSED CONTACTS) TED CONDITIONAL ORT-CIRCUIT CURRENT) ERVOLTAGE TEGORY III T failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) GREE OF PROTECTION ONT SIDE) MBER OF POLES DUNTING METHOD Surface mounting MEER OF PROTECTION ORD SUITABLE FOR GREE OF PROTECTION ORD SUITABLE FOR GREE OF PROTECTION ORD SUITABLE FOR MBER OF SWITCHES 1 440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Half- sinusoidal shock 20 ms ESPAN, MECHANICAL AD RATING O CE SO C AD °C		Short thumb-grip
MPERATURE ICLOSED) - MIN MBER OF AUXILIARY NTACTS (CHANGE- ER CONTACTS) MBER OF AUXILIARY NTACTS (NORMALLY DISED CONTACTS) TED CONDITIONAL ORT-CIRCUIT CURRENT) ERVOLTAGE TEGORY III 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) GREE OF PROTECTION ONT SIDE) MBER OF POLES Three-pole DUNTING METHOD Surface mounting MBER OF SWITCHES ITABLE FOR MBER OF SWITCHES THEE OCK RESISTANCE OCK RESISTANCE AD RATING AD RATING OCK WITCH AND	AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
NTACTS (CHANGE- ER CONTACTS) MBER OF AUXILIARY NTACTS (NORMALLY DSED CONTACTS) TED CONDITIONAL ORT-CIRCUIT CURRENT) ERVOLTAGE TEGORY III 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) GREE OF PROTECTION ONT SIDE) MBER OF POLES Three-pole DUNTING METHOD GREE OF PROTECTION NEMA 12 ITABLE FOR Ground mounting MBER OF SWITCHES 1 440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Half- sinusoidal shock 20 ms ESPAN, MECHANICAL AD RATING AD RATING AD RATING OCK (With intermittent operation class 12, 60 % duty factor) 2 x le (with intermittent operation class 12, 25 % duty factor) 4 duty factor) 2 x le (with intermittent operation class 12, 25 % duty factor)	AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
NTACTS (NORMALLY DEED CONTACTS) TED CONDITIONAL CORT-CIRCUIT CURRENT 50 kA III ERVOLTAGE TEGORY III NTROL CIRCUIT Switching operations statistically determined, at 24 V DC, 10 mA) GREE OF PROTECTION ONT SIDE) MBER OF POLES Three-pole DUNTING METHOD Surface mounting GREE OF PROTECTION NEMA 12 ITABLE FOR Ground mounting MBER OF SWITCHES 1 440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms ESPAN, MECHANICAL 300,000 Operations 1.3 x l _e (with intermittent operation class 12, 60 % duty factor) 2 x l _e (with intermittent operation class 12, 25 % duty factor)	NUMBER OF AUXILIARY CONTACTS (CHANGE- OVER CONTACTS)	0
ORT-CIRCUIT CURRENT) ERVOLTAGE TEGORY 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) IP65 MBER OF PROTECTION ONT SIDE) MBER OF POLES Three-pole OUNTING METHOD Surface mounting GREE OF PROTECTION NEMA 12 ITABLE FOR Ground mounting MBER OF SWITCHES 1 440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Half- sinusoidal shock 20 ms ESPAN, MECHANICAL 300,000 Operations 1.3 x I _e (with intermittent operation class 12, 60 % duty factor) 2 x I _e (with intermittent operation class 12, 25 % duty factor)	NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
TEGORY 1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA) IP65 IMBER OF PROTECTION ONT SIDE) IMBER OF POLES IMBER OF PROTECTION ONTING METHOD IP65 ITABLE FOR ITABLE FOR ITABLE FOR IFE ISOLATION IFE	RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	50 kA
Switching operations statistically determined, at 24 V DC, 10 mA) GREE OF PROTECTION ONT SIDE) MBER OF POLES Three-pole DUNTING METHOD GREE OF PROTECTION ONT SIDE) MBER OF POLES Three-pole DUNTING METHOD Surface mounting MEMA 12 ITABLE FOR Ground mounting MBER OF SWITCHES 1 440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms ESPAN, MECHANICAL 300,000 Operations 1.3 x l _e (with intermittent operation class 12, 60 % duty factor) 2 x l _e (with intermittent operation class 12, 25 % duty factor)	OVERVOLTAGE CATEGORY	Ш
MBER OF POLES Three-pole DUNTING METHOD Surface mounting MEE OF PROTECTION NEMA 12 ITABLE FOR Ground mounting MBER OF SWITCHES 1 440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms ESPAN, MECHANICAL 300,000 Operations 1.3 x l _e (with intermittent operation class 12, 60 % duty factor) 2 x l _e (with intermittent operation class 12, 25 % duty factor)	CONTROL CIRCUIT RELIABILITY	switching operations statistically determined, at
Surface mounting GREE OF PROTECTION NEMA 12 ITABLE FOR Ground mounting MBER OF SWITCHES 1 440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms ESPAN, MECHANICAL 300,000 Operations 1.3 x l _e (with intermittent operation class 12, 60 % duty factor) 2 x l _e (with intermittent operation class 12, 25 % duty factor)	DEGREE OF PROTECTION (FRONT SIDE)	IP65
GREE OF PROTECTION ITABLE FOR Ground mounting ### 440 V AC, Between the contacts, According to EN 61140 REW SIZE M440 V AC, Between the contacts, According to EN 61140 REW SIZE M440 V AC, Between the contacts, According to EN 61140 M45 Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms ### ESPAN, MECHANICAL 300,000 Operations 1.3 x l _e (with intermittent operation class 12, 60 % duty factor) 2 x l _e (with intermittent operation class 12, 25 % duty factor)	NUMBER OF POLES	Three-pole
TABLE FOR Ground mounting 440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms ESPAN, MECHANICAL 300,000 Operations 1.3 x l _e (with intermittent operation class 12, 60 % duty factor) 2 x l _e (with intermittent operation class 12, 25 % duty factor)	MOUNTING METHOD	Surface mounting
MBER OF SWITCHES 440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms ESPAN, MECHANICAL 300,000 Operations 1.3 x l _e (with intermittent operation class 12, 60 % duty factor) 2 x l _e (with intermittent operation class 12, 25 % duty factor)	DEGREE OF PROTECTION	NEMA 12
FE ISOLATION A440 V AC, Between the contacts, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms ESPAN, MECHANICAL 300,000 Operations 1.3 x l _e (with intermittent operation class 12, 60 % duty factor) 2 x l _e (with intermittent operation class 12, 25 % duty factor)	SUITABLE FOR	Ground mounting
CONTACTS, According to EN 61140 REW SIZE M4, Terminal screw 15 g, Mechanical, According to IEC/EN 60068-2-27, Halfsinusoidal shock 20 ms ESPAN, MECHANICAL 300,000 Operations 1.3 x l _e (with intermittent operation class 12, 60 % duty factor) 2 x l _e (with intermittent operation class 12, 25 % duty factor)	NUMBER OF SWITCHES	1
$ \begin{array}{c} \textbf{15 g, Mechanical,} \\ \textbf{According to IEC/EN} \\ \textbf{60068-2-27, Half-sinusoidal shock 20 ms} \\ \textbf{ESPAN, MECHANICAL} & 300,000 \ \text{Operations} \\ \textbf{1.3 x l}_e \ \text{(with intermittent operation class 12, 60 \% duty factor)} \\ \textbf{2 x l}_e \ \text{(with intermittent operation class 12, 25 \% duty factor)} \\ \textbf{4D RATING} & \textbf{0000} \\ \textbf{1000} \\$	SAFE ISOLATION	contacts, According to EN
According to IEC/EN $60068-2-27$, Halfsinusoidal shock 20 ms ESPAN, MECHANICAL $300,000$ Operations 1.3 x I_e (with intermittent operation class 12, 60 % duty factor) $2 \times I_e$ (with intermittent operation class 12, 25 % duty factor)	SCREW SIZE	M4, Terminal screw
1.3 x I_e (with intermittent operation class 12, 60 % duty factor) 2 x I_e (with intermittent operation class 12, 25 % duty factor)	SHOCK RESISTANCE	According to IEC/EN 60068-2-27, Half-
operation class 12, 60 % duty factor) $2 \times I_e \text{ (with intermittent)}$ $\mathbf{AD \ RATING} \qquad \text{operation class 12, 25 \%}$ duty factor)	LIFESPAN, MECHANICAL	300,000 Operations
operation class 12, 40 % duty factor)	LOAD RATING	operation class 12, 60 % duty factor) $2 \times I_e$ (with intermittent operation class 12, 25 % duty factor) $1.6 \times I_e$ (with intermittent operation class 12, 40 %
2 x (1 - 4) mm ² , flexible with ferrules to DIN 46228 $1 \times (1 - 4) \text{ mm}^2$, flexible		uuty factor)

	with ferrules to DIN 46228 1 x (1.5 - 6) mm ² , solid or stranded 2 x (1.5 - 6) mm ² , solid or stranded
SAFETY PARAMETER (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
NUMBER OF CONTACTS IN SERIES AT DC-23A, 120 V	3
NUMBER OF CONTACTS IN SERIES AT DC-23A, 24 V	1
NUMBER OF CONTACTS IN SERIES AT DC-23A, 48 V	2
NUMBER OF CONTACTS IN SERIES AT DC-23A, 60 V	2
RATED BREAKING CAPACITY AT 220/230 V (COS PHI TO IEC 60947-3)	190 A
RATED BREAKING CAPACITY AT 400/415 V (COS PHI TO IEC 60947-3)	150 A
RATED BREAKING CAPACITY AT 500 V (COS PHI TO IEC 60947-3)	170 A
RATED BREAKING CAPACITY AT 660/690 V (COS PHI TO IEC 60947-3)	150 A
RATED MAKING CAPACITY UP TO 690 V (COS PHI TO IEC/EN 60947-3)	240 A
RATED OPERATING VOLTAGE (UE) - MAX	690 V
RATED OPERATING VOLTAGE (UE) - MIN	690 V
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	690 V
SHORT-CIRCUIT PROTECTION RATING	25 A gG/gL, Fuse, Contacts
RATED OPERATIONAL CURRENT (IE) AT AC-21, 440 V	25 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 230 V	25 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A,	25 A

400 V, 415 V	
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 500 V	17.4 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 690 V	12 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V	19.6 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	15.2 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V	12.1 A
RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V	8.8 A
RATED OPERATIONAL CURRENT (IE) AT DC-1, LOAD-BREAK SWITCHES L/R = 1 MS	25 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 120 V	12 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 24 V	25 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 48 V	25 A
RATED OPERATIONAL CURRENT (IE) AT DC-23A, 60 V	25 A
RATED OPERATIONAL POWER AT AC-23A, 220/230 V, 50 HZ	5.5 kW
RATED OPERATIONAL POWER AT AC-23A, 400 V, 50 HZ	13 kW
RATED OPERATIONAL POWER AT AC-23A, 500 V, 50 HZ	11 kW
RATED OPERATIONAL POWER AT AC-23A, 690 V, 50 HZ	11 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	7.5 kW
RATED OPERATIONAL POWER AT AC-3, 415 V, 50	7.5 kW

RATED OPERATIONAL POWER AT AC-3, 690 V, 50 7.5 kW 14 Nm, Screw terminals **TIGHTENING TORQUE** 1.6 Nm, Screw terminals Rated uninterrupted UNINTERRUPTED current lu is specified for **CURRENT** max. cross-section. **HOUSING MATERIAL** Plastic

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

00:



Eaton House 30 Pembroke Road Dublin 4, □□□ Eaton.com

information.





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