Main switch, 20 A, surface mounting, 3 pole + N, STOP function, With black rotary handle and locking ring, Lockable in the 0 (Off) position



Part no. J20/B/N 199553

Postect name Part no. 2008N SAN SAN SAN SAN SAN SAN SAN SAN SAN SA		
Product rangit/Depth	Product name	Eaton J-Range enclosed switch-disconnector
Product Lamphy Depoh Product No hight Product weight Product weight Cortifications Cortifications Product Trindename Product Trindename Product Shi Type Product Shi Type Product Shi Type Catalog Netus Catalog Netus Field with: Catalog Netus Catalog Ca	Part no.	J20/B/N
Product weight Product would P	EAN	5027590552103
Product width Product wight Confiniteations Co	Product Length/Depth	115 millimetre
Product weight Confinentions C	Product height	180 millimetre
Conficientions VDE MISSON INSIGNATION CONTRIBUTION CONTR	Product width	100 millimetre
ECEN ROSA ECEN	Product weight	0.447 kilogram
Product Type Product Sub Type Catalog Notes	Certifications	IEC/EN 60947 IEC/EN 60204
Product Sub Type Estalog Notes Festures Fes	Product Tradename	J-Range
Catalog Notes Retad Short-time Withstand Current (low) for a time of 1 second Features Version as main switch Fitted with: Assembly sheet screen Eitted with: Same by Sheet screen Functions Sin De function Functions 100 Plushing Locking facility Lockable in the 0 (0ff) position Locking facility Lockable in the 0 (0ff) position Number of poles NEMA 12 Degree of protection NEMA 12 Uses an mechanical 100 300,000 Operations Mounting method Surface mounting Mounting position As required Overvoltage category Ill Product Category Minis switch Rated impulse withstand voltage (Ulimp) 6000 V AC Safe's parameter (EN ISO 1384-1) 100 Values as aper EN ISO 1384-1, table C.1 Shock resistance 15 g, Mechanical, According to EN 61140 Suitable for 55 °C Ambient operating temperature (enclosed) - max 40 °C Climatic proofing 2mp poat, cyclic, to IEC 60088-2-30 Ambient operating temperature (enclosed) - max	Product Type	Enclosed switch-disconnector
Features Peatures Resembly sheet screen Black transphandie and focking ring Push through set borty disphragin Functions Functions Functions Functions Functions Locking facility Locking facility Degree of protection Number of poles Degree of protection Nembar 2 Degree of protection Nembar 2 Lifespan, mechanical Lifespan, mechanical Mounting groting Mounting position Mounting protein Mounting protein Degree of protection Nembar 2 Lifespan, mechanical Degree of protection Nembar 2 Lifespan, mechanical Degree of protection (front side) Lifespan, mechanical Lifespan, mechanical Degree of protection (front side) Lifespan, mechanical Lifes	Product Sub Type	None
Fitted with: Fi	Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
Fitted with: Fi		
Punctions		Version as maintenance-/service switch Assembly sheet screen
Locking facility Number of poles Degree of protection Degree of protect	Functions	Push-through cable entry diaphragm STOP function
Number of poles Degree of protection Degree of protection Degree of protection (front side) Degree of prote		
Degree of protection Degree of protection (front side) Lifespan, mechanical Mounting method Mounting method Mounting position Operating frequency Operating frequency Degree at segory Product Category Rated impulse withstand voltage (Uimp) Safety parameter (EN ISO 13849-1) Shock resistance Suitable for Ambient operating temperature (enclosed) - mix Ambient operating temperature (enclosed) - mix Climatic proofing Erriminal capacity Screw size Mu, Terminal screw		
Degree of protection (front side) Lifespan, mechanical Mounting method Mounting position Operating frequency Operating frequency Overobtage category Product Category Rated impulse withstand voltage (Uimp) Safe isolation Shock resistance Suitable for Shock resistance Suitable for Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Ambient operating temperature (enclosed) - max Climatic proofing Terminal capacity Srew size HP65 Surface mounting Surface mounting Aus required As required 1200 Operations/h As required 1200 Operations/h 1200 Operation	Number of poles	Four-pole
Degree of protection (front side) Lifespan, mechanical Mounting method Mounting position Operating frequency Operating frequency Overobtage category Product Category Rated impulse withstand voltage (Uimp) Safe isolation Shock resistance Suitable for Shock resistance Suitable for Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Ambient operating temperature (enclosed) - max Climatic proofing Terminal capacity Srew size HP65 Surface mounting Surface mounting Aus required As required 1200 Operations/h As required 1200 Operations/h 1200 Operation		
Lifespan, mechanical Mounting method Mounting position Mounting position Operating frequency Operating frequency Overvoltage category Pollution degree Rated impulse withstand voltage (Uimp) Safe isolation Safe isolation Safe isolation Shock resistance Shock resistance Suitable for Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Climatic proofing Terminal capacity Srew size Size Min Freminal capacity And the many flexible with ferrules to DIN 46228 2x(14) mm², flexible with ferrules to DIN 46228 2x(14) mm², flexible with ferrules to DIN 46228 2x(14) mm², flexible with ferrules to DIN 46228 My Terminal screw Mounting method As required As r		
Mounting method Surface mounting Mounting position As required Operating frequency 1200 Operations/h Overvoltage category III Pollution degree 3 Product Category Main switch Rated impulse withstand voltage (Uimp) 6000 V AC Safe isolation 440 V AC, Between the contacts, According to EN 61140 Safety parameter (EN ISO 13849-1) B 10d values as per EN ISO 13849-1, table C.1 Shock resistance 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms Suitable for Ground mounting Ambient operating temperature (enclosed) - min -25 °C Ambient operating temperature (enclosed) - max 40 °C Climatic proofing Damp heat, cyclic, to IEC 60068-2-30 and heat, constant, to IEC 60068-2-78 Terminal capacity 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 1x (1.5 - 6) mm², solid or stranded 2x (1 - 4) mm², flexible with ferrules to DIN 46228 Screw size M4, Terminal screw		
Mounting position Operating frequency 1200 Operations/h Overvoltage category III Pollution degree 3 Product Category Main switch Rated impulse withstand voltage (Uimp) Safe isolation Safe isolation Safety parameter (EN ISO 13849-1) Shock resistance Suitable for Suitable for Suitable for Suitable for Suitable for Suitable for Suitable operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Climatic proofing Terminal capacity Terminal capacity Screw size As required 1200 Operations/h Main switch Main switch 9000 V AC 440 V AC, Between the contacts, According to EN 61140 1400 V AC, Between the contacts, According to EN 61140 150 (and would sa se per EN ISO 13849-1, table C.1 150 (and mounting) For Ground mounting 150 (and mounting) 150 (and mo		
Operating frequency 1200 Operations/h Overvoltage category III Pollution degree 3 Product Category Main switch Rated impulse withstand voltage (Uimp) 6000 V AC Safe isolation 440 V AC, Between the contacts, According to EN 61140 Safety parameter (EN ISO 13849-1) B10d values as per EN ISO 13849-1, table C.1 Shock resistance 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms Suitable for Ground mounting Ambient operating temperature (enclosed) - min -25 °C Ambient operating temperature (enclosed) - max 40 °C Climatic proofing Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Terminal capacity 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 X (1 - 5) Imm², solid or stranded 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 Screw size M4, Terminal screw	-	Surface mounting
Dervoltage category Pollution degree 3 Product Category Main switch 6000 V AC Safe isolation Safety parameter (EN ISO 13849-1) Shock resistance Suitable for Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Ambient operating temperature (enclosed) - max Terminal capacity Terminal capacity Screw size III Main switch 6000 V AC 600 V AC 6	Mounting position	As required
Pollution degree 3 Product Category Main switch Rated impulse withstand voltage (Uimp) 6000 V AC Safe isolation 440 V AC, Between the contacts, According to EN 61140 Safety parameter (EN ISO 13849-1) B10d values as per EN ISO 13849-1, table C.1 Shock resistance 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms Suitable for Ground mounting Ground mounting Ambient operating temperature (enclosed) - min - 25 °C Ambient operating temperature (enclosed) - max 40 °C Climatic proofing Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Terminal capacity 1 x (1 - 4) mm², flexible with ferrules to DIN 46228	Operating frequency	1200 Operations/h
Product Category Rated impulse withstand voltage (Uimp) Safe isolation Safety parameter (EN ISO 13849-1) Shock resistance Suitable for Suitable for Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Climatic proofing Terminal capacity Terminal capacity Screw size Main switch 6000 V AC 6000 V AC 6000 V AC, Between the contacts, According to EN 61140 6000 V AC 600 V AC 6000 V A	Overvoltage category	III
Rated impulse withstand voltage (Uimp) Safe isolation Safe isolation Safe isolation Safety parameter (EN ISO 13849-1) Shock resistance Suitable for Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Climatic proofing Terminal capacity Terminal capacity Scew size Scew size 6000 V AC 440 V AC, Between the contacts, According to EN 61140 440 V AC, Between the contacts, According to EN 61140 515 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms Ground mounting 670 C	Pollution degree	3
Safe isolation Safety parameter (EN ISO 13849-1) Shock resistance Suitable for Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Climatic proofing Terminal capacity Terminal capacity Screw size A40 V AC, Between the contacts, According to EN 61140 B10d values as per EN ISO 13849-1, table C.1 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms Ground mounting 40 °C Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Terminal capacity 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x (1.5 - 6) mm², solid or stranded 2 x (1.5 - 6) mm², solid or stranded 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 M4, Terminal screw	Product Category	Main switch
Safety parameter (EN ISO 13849-1) Shock resistance Suitable for Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Climatic proofing Terminal capacity Terminal capacity Screw size B10d values as per EN ISO 13849-1, table C.1 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms Ground mounting -25 °C 40 °C Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x (1.5 - 6) mm², solid or stranded 2 x (1.6 - 6) mm², solid or stranded 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 M4, Terminal screw	Rated impulse withstand voltage (Uimp)	6000 V AC
Shock resistance Suitable for Ground mounting Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Climatic proofing Terminal capacity Terminal capacity Screw size 15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms Found mounting -25 °C 40 °C Climatic proofing Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x (1.5 - 10) mm², solid or stranded 2 x (1.5 - 6) mm³, solid or stranded 2 x (1.7 - 4) mm², flexible with ferrules to DIN 46228 M4, Terminal screw M4, Terminal screw	Safe isolation	440 V AC, Between the contacts, According to EN 61140
Suitable for Ground mounting Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Climatic proofing Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Terminal capacity 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x (1.5 - 10) mm², solid or stranded 2 x (1.5 - 6) mm², solid or stranded 2 x (1.5 - 6) mm², flexible with ferrules to DIN 46228 X (1 - 4) mm², flexible with ferrules to DIN 46228 M4, Terminal screw	Safety parameter (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
Ambient operating temperature (enclosed) - min Ambient operating temperature (enclosed) - max Climatic proofing Terminal capacity Screw size Ambient operating temperature (enclosed) - max -25 °C 40 °C Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x (1.5 - 10) mm², solid or stranded 2 x (1.5 - 6) mm², solid or stranded 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 M4, Terminal screw	Shock resistance	15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms
Ambient operating temperature (enclosed) - max 40 °C Climatic proofing Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Terminal capacity 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x (1.5 - 6) mm², solid or stranded 2 x (1.5 - 6) mm², solid or stranded 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 8 Crew size M4, Terminal screw	Suitable for	Ground mounting
Ambient operating temperature (enclosed) - max 40 °C Climatic proofing Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Terminal capacity 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x (1.5 - 6) mm², solid or stranded 2 x (1.5 - 6) mm², solid or stranded 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 M4, Terminal screw		
Climatic proofing Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78 Terminal capacity 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x (1.5 - 10) mm², solid or stranded 2 x (1.5 - 6) mm², solid or stranded 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 Screw size M4, Terminal screw	Ambient operating temperature (enclosed) - min	-25 °C
Damp heat, constant, to IEC 60068-2-78 Terminal capacity 1 x (1 - 4) mm², flexible with ferrules to DIN 46228 1 x (1.5 - 10) mm², solid or stranded 2 x (1.5 - 6) mm², solid or stranded 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 Screw size M4, Terminal screw	Ambient operating temperature (enclosed) - max	40 °C
1 x (1.5 - 10) mm², solid or stranded 2 x (1.5 - 6) mm², solid or stranded 2 x (1 - 4) mm², flexible with ferrules to DIN 46228 Screw size M4, Terminal screw	Climatic proofing	
·		1 x (1.5 - 10) mm², solid or stranded 2 x (1.5 - 6) mm², solid or stranded 2 x (1 - 4) mm², flexible with ferrules to DIN 46228

Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)	260 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	300 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)	290 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	250 A
Rated operational current (Ie) at AC-21, 440 V	20 A
Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms	20 A
Rated operational power at AC-3, 380/400 V, 50 Hz	0 kW
Rated operational power at AC-23A, 400 V, 50 Hz	8 kW
Rated operational voltage (Ue) at AC - max	690 V
Rated uninterrupted current (Iu)	20 A
Uninterrupted current	Rated uninterrupted current lu is specified for max. cross-section.
Rated conditional short-circuit current (Iq)	80 kA
Rated short-time withstand current (Icw)	0.64 kA 640 A, Contacts, 1 second
Short-circuit protection rating	50 A gG/gL, Fuse, Contacts
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)	320 A
Voltage per contact pair in series	60 V
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Actuator color	Black
Actuator type	Door coupling rotary drive
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.
10.2.5 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 assemblies	Does not apply, since the entire switchgear needs to 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	Is the panel builder's responsibility.
10.8 Connections for external conductors	Is the panel builder's responsibility.
10.9.2 Power-frequency electric strength	Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage	Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material	Is the panel builder's responsibility.
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	Is 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.

Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch

Yes

Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Number of switches		1
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	415 - 690
Rated permanent current lu	А	20
Rated permanent current at AC-23, 400 V	А	
Rated permanent current at AC-21, 400 V	Α	20
Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current lcw	kA	0.64
Rated operation power at AC-23, 400 V	kW	8
Switching power at 400 V	kW	
Conditioned rated short-circuit current Iq	kA	80
Number of poles		4
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		No
Device construction		Complete device in housing
Suitable for floor mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting centre		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Colour control element		Black
Type of control element		Door coupling rotary drive
Interlockable		Yes
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP65
Degree of protection (NEMA)		12