



## Low Voltage Disconnectors

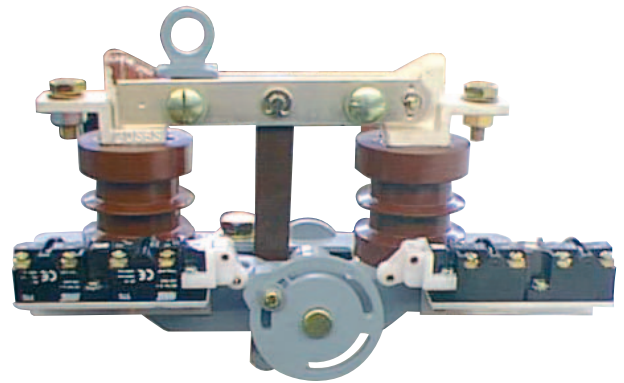
**HAZ Range**

**1 500V Traction Network**

**100 A to 3.15 kA**

**One pole – Switch hook operation**

- Large isolation air and creepage path
- Self-cleaning blade contacts
- True opening and visible distance
- Rugged anti-torsion construction
- Large customisation with :
  - Auxiliary switches, blocking magnets
- According to IEC 62271-102



### Electrical Characteristics

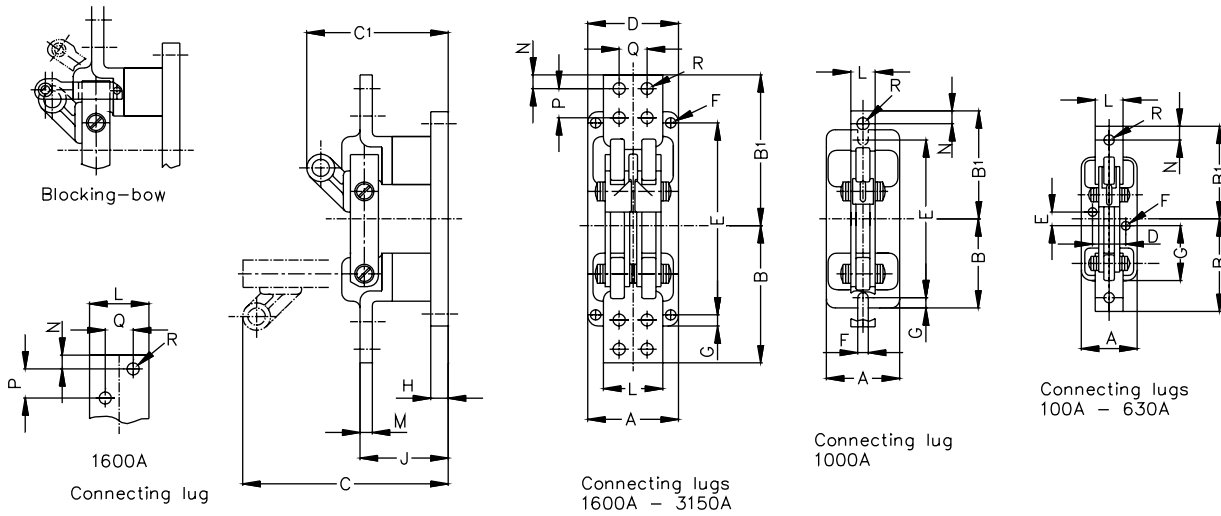
Rated thermal current		RMS 1 sec short-time withstand current (kA)	Rated peak current (kA)
AC (A)	DC (A)		
100	100	22	56
200	200	22	56
400	400	40	100
630	630	40	100
1000	1250	49	123
1600	1900	52	130
2000	2400	57	143
3150	3750	67	168

Nominal Traction Network Voltage (kV)	Dielectric withstand Voltage 1 min/50Hz (kV)	Rated impulse withstand voltage BIL (kV)
1.5	6.5	12

- No-load operation
- Indoor type – only vertical mounting
- Mechanical endurance: <1kA = 50 000 cycles; 1 cycle = open + close
- Maximum temperature withstand at 130° C without damages to the switch
- Electrical contact by contact knives with pressed on hard silver contact rivets and silver-plated
- Small making / breaking capacity (as option)
- Supporting insulators made of cast epoxy resin (fire classification according to UL94-V1)

## Main dimensions

### HAZ 100 - 3 150Amp



Amp AC	A poles	B =B1	C	C1	D	E	Fø	G	H	J	L	M	N	P	Q	Rø	Weight (kg)
100	66	99	175	100				65.5		58	25	4	12.5			9.5	0.9
200																11.5	1.0
400		115			30	25	10.5	77.5	12							11	1.9
630	80	125	205	120						72	30	6	15				2.3
1000	105	139	242	160	-	230	12			98	40	10	20				4.3
1600	112	192	300	185	82			15	25	113	60	12	18	27	27	14	6.8
2000		215	310	200		280	14			125	80	18	20	40	40		11.0
3150	130		330	220	100					130	100				50		15.0

## Switch hooks

Construction : Hard paper with DIN-hooks according to VDE 0681, part 2. Only suitable for dry rooms

Reference number	Length (mm)	Dielectric Withstand voltage (kV)	Weight (kg)
1.021.04	1120	20	0.81
1.021.06	1520	45	0.99
1.021.07	2020	60	1.21

Ferraz Shawmut has it all for defining and offering customized solutions to meet your most specific requirements :

- Adapted drives or control units
- Adapted technical performances



## Low voltage disconnectors

### HA Range

### 1 500V Traction Network

### 100 A to 3.15 kA

### Number of poles: 1,2,3,...

- Large isolation air and creepage path
- Self-cleaning blade contacts
- True opening and visible distance
- Rugged anti-torsion construction
- Large customisation with :
  - Manual, motor, pneumatic drives
  - Auxiliary switches, blocking magnets
- According to IEC 62271-102
- Dimensions Fitting

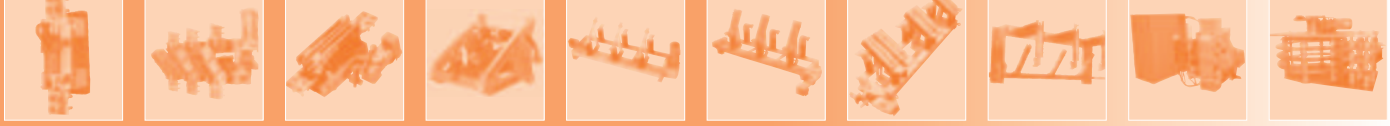


## Electrical Characteristics

Rated thermal current		RMS 1 sec short-time withstand current (kA)	Rated peak current (kA)
AC (A)	DC (A)		
100	100	22	55
200	200	22	55
400	400	40	100
630	630	40	100
1000	1250	49	123
1600	1900	52	130
2000	2400	52	130
3150	3750	67	168

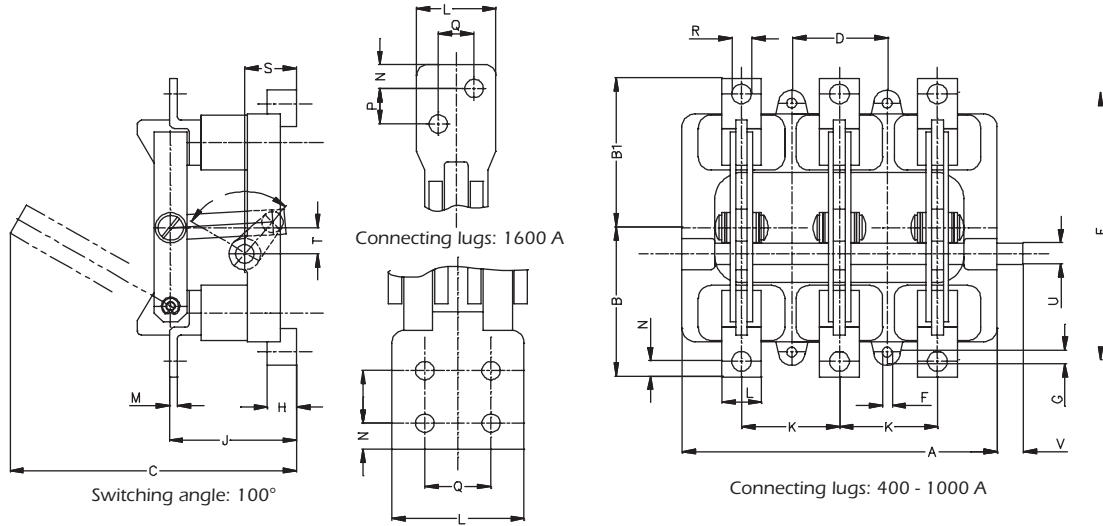
Nominal Traction Network Voltage (kV)	Dielectric withstand Voltage 1 min/50Hz (kV)	Rated impulse withstand voltage BIL (kV)
1.5	6.5	12

- No-load operation
- Indoor type – only vertical mounting
- Mechanical endurance:  $\leq 1\text{ kA} = 25\ 000$  cycles;  $>1\text{ kA} = 50\ 000$  cycles ( open / close)
- Maximum temperature withstand at 130° C without damages to the switch
- Electrical contact by contact knives with pressed on hard silver contact rivets and silver-plated electrolytic copper plates
- Small making / breaking capacity (on demand)
- Supporting insulators made of cast epoxy resin (fire classification according to UL94-V1)



## Main dimensions

### HA 100A - 3 150A



\*\* Enlargement Dimensions  
C, J, H for Motor drive

Amp AC	No of poles	A	B	B1	C(**)	D	E	FØ	G	H(**)	J(**)	K	L	M	N	P	Q	R	S	T	UØ	V	**	Drive	
400	1	90	117	115	203	70	190		10	25	84		30	6	15	-	-	11	28	20	15	40		1A	
630			127	125									40		20										
1000			105	139	139	230	75	230	9			98			10						22	18	50		
1600				192	192							118	-	60	12	18	27	27	14				70	-	1B
2000			150	215	215	294	120	280	14	15	30	130		80	18	20	40	40		55	29	25	80		
3150											135		100				50								
100	2	130	101	99	185	70					25	83	70	25	4	12.5		9.5	39	23	12				
200																		11.5							
400			175	117	115	215	85		9	10													40		1A
630				127	125							22	96	85	30	6	40		20						
1000			270	139	139	235	245		15	30	103	120			10				33	22	18	50			1B
1600		300	192	192		266		14			120		60	12	18	27	27	14			25	70			
2000		330	215	215	296	296		32.5	32		132	150	80	18	20	40	40		57	29	30	80	20	2	
3150		394			354	190	17				137	180	100				50								
100	3	180	101	99	185	60				25	83	60	25	4	12.5			9.5	39	23	12				
200			200			70				10		70						11.5					40		1A
400			240	117	115	215	75		9			75	30	6	15			11	40	20	15				
630			260	127	125		85					85	40		20										
1000			360	139	139	235	120		15	30	103	120			10					33	22	18	50		1B
1600		420	192	192		386		14			120	60	12	18	27	27		14			25	70			
2000		480	215	215	296	446		32.5	32		132	150	80	18	20	40	40		57	29	30	80	20	2	
3150		574			534		17				137	180	100				50								

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