

Switch-disconnector, 3p, 1600A, fixed

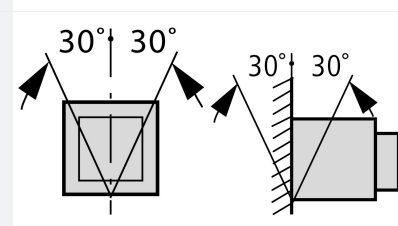
Part no. IN20N3-16F  
 Catalog No. 123457

**Delivery program**

Product range			Air circuit-breakers/switch-disconnectors
Product range			Open switch-disconnectors
Current Range			4000 to 6300 A
Protective function			without protection
Installation type			Fixed
Construction size			IN20
Standard/Approval			IEC
Number of poles			3 pole
Degree of Protection			IP20, IP55 with protective cover
Rated current = rated uninterrupted current	$I_n = I_u$	A	1600
up to 440 V 50/60 Hz	$I_{cm}$	kA	69
t = 1 s	$I_{cw}$	kA	65
t = 3 s	$I_{cw}$	kA	40
<b>Notes</b>			
Including rear connection main terminals and secondary terminal blocks according to ordered breaker options.			

**Technical data**

**General**

Standards			IEC/EN 60947
Ambient temperature			
Storage	$\theta$	°C	-40 - +70
Operating (open)		°C	-25 - +70
Mounting position			
Utilization category			B
Degree of Protection			IP20, IP55 with protective cover
Direction of incoming supply			as required

**Main conducting paths**

Rated current = rated uninterrupted current	$I_n = I_u$	A	1600
Rated uninterrupted current at 50 °C	$I_u$	A	1600
Rated uninterrupted current at 60 °C	$I_u$	A	1500
Rated uninterrupted current at 70 °C	$I_u$	A	1350
Rated impulse withstand voltage	$U_{imp}$	V AC	8000
Rated operational voltage	$U_e$	V AC	690
Use in IT electrical power networks up to U = 440 V	$I_{IT}$	kA	23
Oversvoltage category/pollution degree			III/3
Rated insulation voltage	$U_i$	V	1000

**Switching capacity**

Rated short-circuit making capacity	$I_{cm}$		
up to 440 V 50/60 Hz	$I_{cm}$	kA	69
up to 690 V 50/60 Hz	$I_{cm}$	kA	143
Rated short-time withstand current 50/60 Hz			
t = 1 s	$I_{cw}$	kA	65

t = 3 s	I <sub>cw</sub>	kA	40
<b>Operating times</b>			
Closing delay via spring release		ms	35
Break times		ms	40
Total opening delay via shunt release		ms	30
Total opening delay via undervoltage release		ms	35/70
<b>Maximum operating frequency</b>			
Maximum operating frequency	Operations/h		60
<b>Heat dissipation at rated current I<sub>n</sub></b>			
Fixed mounting		W	180
Withdrawable units (switch with cassette)		W	360

### Weight

<b>Fixed mounting</b>			
3-pole		kg	43
4-pole		kg	54
<b>Withdrawable</b>			
3-pole		kg	48
4-pole		kg	62
<b>Cassette</b>			
3 pole		kg	34
4 pole		kg	38

### Terminal capacities

<b>Copper bar</b>			
<b>Fixed mounting</b>			
Black		mm	2 x 5 x 100
<b>Withdrawable units</b>			
Black		mm	2 x 5 x 100
Permissible continuous current for circuit-breakers operating in switchboards at various internal ambient temperatures. The switchboard's internal ambient temperature should be estimated using the calculation methods of IEC regulation.			

### Design verification as per IEC/EN 61439

<b>Technical data for design verification</b>			
Operating ambient temperature max.		°C	-25
Operating ambient temperature max.		°C	70

## Dimensions

