## DATASHEET - IN63N4-40F

Switch-disconnector, 4p, 4000A, fixed

Part no.	IN63N4-40F
Catalog No.	124371



## **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			IN63
Standard/Approval			IEC
Number of poles			4 pole
Degree of Protection			IP20, IP55 with protective cover
Rated current = rated uninterrupted current	$I_n = I_u$	А	4000
up to 440 V 50/60 Hz	I <sub>cm</sub>	kA	138
t = 1 s	I <sub>cw</sub>	kA	85
t = 3 s	I <sub>cw</sub>	kA	65
Notes			
Including rear connection main terminals and secondary terminal blocks according to ordered breaker options.			

**Technical data** 

Anheint temperature     Image: Construct temperature     Constemperature     Construct temperature	General			
Storage   6   -C   -0-70     Operating (open)   FC   -25 - 70     Mounding position   FC   -25 - 70     Mounding position   FC   -20 - 70 - 70 - 70 - 70 - 70 - 70 - 70 -	Standards			IEC/EN 60947
Operating (open)     Case and a second seco	Ambient temperature			
Mouning position     Image: Constraint of the second of the seco	Storage	θ	°C	-40 - +70
للائندةش مناوية عن المحكمة المحكم المحكمة المحكمة	Operating (open)		°C	-25 - +70
Degree of Protection P20, P55 with protective cover   Direction of incoming supply as required   Main conducting paths se required   Rated current = rated uninterrupted current In = lu A   Bated uninterrupted current at 50 °C lu 4000   Rated uninterrupted current at 60 °C lu A   Rated uninterrupted current at 70 °C lu A   Rated inpulse withstand voltage lu A   Rated operational voltage Ump VAC   Rated operational voltage In = lu KA   Overvoltage category/pollution degree In KA   Rated short-circuit making capacity In In   up to 440 V 50/60 Hz In In   up to 590 V 50/60 Hz In Sa	Mounting position			
Direction of incoming supply is required   Main conducting paths In = Iu A00   Rated current = rated uninterrupted current Iu Au 4000   Rated uninterrupted current at 60 °C Iu Au 4000   Rated uninterrupted current at 70 °C Iu Au 4000   Rated uninterrupted current at 70 °C Iu Au 4000   Rated uninterrupted current at 70 °C Iu Au 4000   Rated inpulse withstand voltage Iu Au 4000   Rated operational voltage Iu Au 4000   Use in IT electrical power networks up to U = 440 V Iu VAC 5000   Vervoltage category/pollution degree Iu KA 5000   Rated insulation voltage Iu VaC 5000   Vervoltage category/pollution degree Iu 1000   Rated short-circuit making capacity Iu VaC 5000   Up to 440 V 50/60 Hz Iu Iu 1000   up to 5600 V 50/60 Hz Iu Iu 1000   up to 5600 V 50/60 Hz Iu Iu 1000	Utilization category			В
Main conducting paths   In = Iu   Au   400     Rated current = rated uninterrupted current at 50 °C   Iu   Au   400     Rated uninterrupted current at 60 °C   Iu   Au   400     Rated uninterrupted current at 70 °C   Iu   Au   400     Rated ininterrupted current at 70 °C   Iu   Au   400     Rated ininterrupted current at 70 °C   Iu   Au   400     Rated ininterrupted current at 70 °C   Iu   Au   400     Rated ininterrupted current at 70 °C   Iu   Au   400     Rated ininterrupted current at 70 °C   Iu   Au   400     Rated ininterrupted current at 70 °C   Iu   Au   500     Rated ininterrupted current at 70 °C   Iu   500   500     Rated ininterrupted current at 70 °C   Iu   500   500     Use in IT electrical power networks up to U = 440 V   Iu   600   500     Overvoltage category/pollution degree   Iu   Iu   1000     Switching capacity   Iu   600   500   500     Iu to 440 V 50/60 Hz   Iu   Iu   500   500 <td>Degree of Protection</td> <td></td> <td></td> <td>IP20, IP55 with protective cover</td>	Degree of Protection			IP20, IP55 with protective cover
Rated current = rated uninterrupted current ta 50 °C   In = Iu   Au   400     Rated uninterrupted current at 50 °C   Iu   Au   400     Rated uninterrupted current at 60 °C   Iu   Au   400     Rated uninterrupted current at 70 °C   Iu   Au   400     Rated inpulse withstand voltage   Ump   VAC   800     Rated operational voltage   Ump   VAC   90     Rated operational voltage   In   KA   8888888     Overvoltage category/pollution degree   In   KA   8888888     Stated short-circuit making capacity   Iu   Vac   100     Stated short-circuit making capacity   Icm   KA   132     Iu to 440 V 50/60 Hz   Icm   KA   132     Iu to 440 V 50/60 Hz   Icm   KA   132     Iu to 440 V 50/60 Hz   Icm   KA   132     Iu to 440 V 50/60 Hz   Icm   KA   132     Iu to 440 V 50/60 Hz   Icm   KA   132     Iu to 440 V 50/60 Hz   Icm   KA   132     Iu to 440 V 50/60 Hz   Icm   KA   132	Direction of incoming supply			as required
Rated uninterrupted current at 50 °C   Iu   A   400     Rated uninterrupted current at 60 °C   Iu   A   400     Rated uninterrupted current at 70 °C   Iu   A   400     Rated inpulse withstand voltage   Iump   VAC   800     Rated operational voltage   Ump   VAC   800     Use in IT electrical power networks up to U = 440 V   Iu   VAC   8888888     Overvoltage category/pollution degree   Iu   KA   8888888     Overvoltage category/pollution degree   Ui   VAC   800     Switching capacity   Ui   VAC   800     Switching capacity   Iu   VAC   800     up to 440 V 50/60 Hz   Ui   VI   100     up to 650 V 50/60 Hz   Icm   KA   13     up to 650 V 50/60 Hz   Icm   KA   13				
Rated uninterrupted current at 60 °C   Iu   A   4000     Rated uninterrupted current at 70 °C   Iu   A   4000     Rated inpulse withstand voltage   Ump   VAC   8000     Rated operational voltage   Ue   VAC   600     Use in IT electrical power networks up to U = 440 V   IT   KA   8888888     Overvoltage category/pollution degree   II   KA   8888888     Overvoltage category/pollution degree   Ui   V   100     Rated short-circuit making capacity   Ir   KA   100     up to 440 V 50/60 Hz   Ir   Ir   V   100     up to 690 V 50/60 Hz   Ir   Ir   V   100     up to 690 V 50/60 Hz   Ir   Ir   V   100     up to 690 V 50/60 Hz   Ir   Ir   V   100     up to 690 V 50/60 Hz   Ir   Ir   Ir   Ir     up to 690 V 50/60 Hz   Ir   Ir   Ir   Ir     up to 690 V 50/60 Hz   Ir   Ir   Ir   Ir     up to 690 V 50/60 Hz   Ir   Ir   Ir   Ir	Rated current = rated uninterrupted current	$I_n = I_u$	А	4000
Rated uninterrupted current at 70 °C Iu A   Rated inpulse withstand voltage Uinpo V AC 800   Rated operational voltage Ue VAC 60   Use in IT electrical power networks up to U = 440 V IT KA 8888888   Overvoltage category/pollution degree IT KA 8888888   Rated insulation voltage Ue Vac 100   Rated short-circuit making capacity Icm KA 134   up to 690 V 50/60 Hz Icm KA 184   up to 690 V 50/60 Hz Icm KA 184	Rated uninterrupted current at 50 °C	I <sub>u</sub>	А	4000
Rated impulse withstand voltage   Vimp   V AC   800     Rated operational voltage   Ue   V AC   90     Use in IT electrical power networks up to U = 440 V   Imp   KA   8888888     Overvoltage category/pollution degree   Imp   KA   8888888     Overvoltage category/pollution degree   Vimp   Vac   8888888     Switching capacity   Vimp   Vac   100     Switching capacity   Imp   Imp   Vac   100     In to 440 V 50/60 Hz   Imp   Imp   Imp   Imp   Imp     In to 690 V 50/60 Hz   Imp   Imp </td <td>Rated uninterrupted current at 60 °C</td> <td>l<sub>u</sub></td> <td>А</td> <td>4000</td>	Rated uninterrupted current at 60 °C	l <sub>u</sub>	А	4000
Rated operational voltage   Ue   VAC   690     Use in IT electrical power networks up to U = 440 V   IT   KAC   88888888     Overvoltage category/pollution degree   IT   KAC   11/3     Rated insulation voltage   Ue   Vac   1000     Switching capacity   Iran   Kac   1000     Rated short-circuit making capacity   Icm   Vac   138     up to 440 V 50/60 Hz   Iran   Kac   138     Rated short-tircuit making capacity   Icm   Kac   138     up to 690 V 50/60 Hz   Icm   Kac   160     Rated short-tircuit making current 50/60 Hz   Icm   Kac   160	Rated uninterrupted current at 70 °C	lu	А	4000
Use in IT electrical power networks up to U = 440 V Image: Application degree March	Rated impulse withstand voltage	U <sub>imp</sub>	V AC	8000
Overvoltage category/pollution degree Image: Constraint of the second	Rated operational voltage	U <sub>e</sub>	V AC	690
Rated insulation voltage Ui V 1000   Switching capacity Image: Capacity Image: Capacity Image: Capacity   Rated short-circuit making capacity Image: Capacity Image: Capacity Image: Capacity   up to 440 V 50/60 Hz Image: Capacity Image: Capacity Image: Capacity   up to 690 V 50/60 Hz Image: Capacity Image: Capacity Image: Capacity   Rated short-time withstand current 50/60 Hz Image: Capacity Image: Capacity Image: Capacity	Use in IT electrical power networks up to U = 440 V	IIT	kA	88888888
Switching capacity Icm   Rated short-circuit making capacity Icm   up to 440 V 50/60 Hz Icm   up to 690 V 50/60 Hz Icm   Rated short-time withstand current 50/60 Hz Icm	Overvoltage category/pollution degree			III/3
Rated short-circuit making capacity Icm Icm   up to 440 V 50/60 Hz Icm KA 138   up to 690 V 50/60 Hz Icm KA 187   Rated short-time withstand current 50/60 Hz Icm KA 187	Rated insulation voltage	Ui	V	1000
up to 440 V 50/60 Hz Image: Comparison of the second sec	Switching capacity			
up to 690 V 50/60 Hz Icm kA 187 Rated short-time withstand current 50/60 Hz	Rated short-circuit making capacity	I <sub>cm</sub>		
Rated short-time withstand current 50/60 Hz	up to 440 V 50/60 Hz	I <sub>cm</sub>	kA	138
	up to 690 V 50/60 Hz	I <sub>cm</sub>	kA	187
t = 1 s I <sub>cw</sub> kA 85	Rated short-time withstand current 50/60 Hz			
	t = 1 s	I <sub>cw</sub>	kA	85

t = 3 s	I <sub>cw</sub>	kA	65
Operating times			
Closing delay via spring release		ms	35
Break times		ms	40
Total opening delay via shunt release		ms	40
Total opening delay via undervoltage release		ms	35/70
Maximum operating frequency		Ops./h	
Maximum operating frequency	Operations/h		60
Heat dissipation at rated current I <sub>n</sub>			
Fixed mounting		W	380
Withdrawable units (switch with cassette)		W	750
Weight			
Fixed mounting			
3-pole		kg	108
4-pole		kg	145
Withdrawable			
3-pole		kg	139
4-pole		kg	166
Cassette			
3 pole		kg	103
4 pole		kg	103
Terminal capacities			
Copper bar			
Fixed mounting			
Black		mm	4 x 10 x 100
Withdrawable units			
Black		mm	4 x 10 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

Technical data for design verification		
Operating ambient temperature max.	°C	-25
Operating ambient temperature max.	°C	70

## Dimensions



