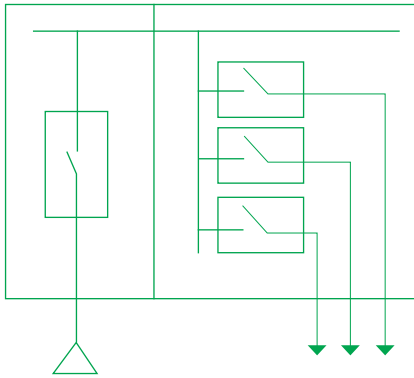


Step 1: Collection of required data

If the relevant parameters of the interfaces are known,
it is possible to dimension ASSEMBLIES

3 Installation and environmental conditions



4 Operating and servicing

1 Connection to the electrical system

2 Circuits and consumers

1 Connection to the electrical system

Characteristics	Information provided by the planner / customer	Information provided by the manufacturer
Nominal voltage of the incoming supply	AC _____ V _____ Hz DC _____ V	$U_e =$ _____ V $f_n =$ _____ Hz
System	_____ TN-C _____ TN-C-S _____ TN-S _____ TT _____ IT	_____ Protection by automatic disconnection of the power supply (PC I) _____ protection by protective insulation (PC II)
Rated current	Supply current (nominal current transformer / upstream protective device)	$I_{nA} =$ _____ A
Short-circuit withstand strength (please see notes on pages 73 - 77)	$I_{cp} =$ _____ kA (uninfluenced short-circuit current at the supply terminals)	$I_{pk} =$ _____ kA $I_{cw} =$ _____ kA $I_{cc} =$ _____ kA
Overvoltage	Overvoltage category _____ III _____ IV	Rated impulse withstand voltage $U_{imp} =$ _____ kV
Incoming line connection	_____ from below _____ from above _____ copper conductor _____ aluminium conductor _____ Connection using terminal blocks	_____ single conductor cable _____ multi conductor cable _____ number _____ mm ² section _____ copper conductor _____ aluminium conductor _____ connection to equipment _____ connection using terminal blocks

2 Circuits and consumers

Consumer / circuit types	Information provided by the planner / customer			Data to be derived from step 2 by manufacturer	
	Number of circuits	Type of protective device	Distribution board ratings	Circuit ratings	Type of protective device
				Rated Diversity Factor (RDF) = _____ %	
Distribution circuits for downstream subdistribution boards		___ fuse ___ MCB ___ MCCB			
Final circuits					
	Number of circuits	Type of the protective conductor connection	Consumer ratings	Circuit ratings	Type of protective device
Socket		___ fuse ___ MCB ___ Circuit breaker and residual current device	_____ A	$I_{nc} = \text{_____ A}$	
Ohmic load, heater		___ fuse ___ MCB ___ MCCB	_____ kW	$I_{nc} = \text{_____ A}$	
Inductive consumer, motor, direct		___ fuse ___ MCB ___ MCCB	_____ kW _____ cos φ	$I_{nc} = \text{_____ A}$	
Inductive consumer, motor, controlled		___ fuse ___ MCB ___ manufacturer's description	_____ kW _____ cos φ	$I_{nc} = \text{_____ A}$	

3 Installation and ambient conditions of ASSEMBLIES

Conditions of use	Information provided by the planner / customer	Measures/recommendations of the ASSEMBLY manufacturer		Selection
Indoor installation	Atmospheric conditions	Definition pursuant to standard IEC 61439-1	This information is to be taken into account in the planning of ASSEMBLIES	
	Foreign bodies / dust	not less than IP2X	Comply with more severe requirements arising from the product standard	
	Foreign bodies	Diameter ≥ 12.5 mm	IP2X	
	Foreign bodies	Diameter ≥ 2.5 mm	IP3X	
	Dust	dust-protected	IP5X	
	Increased presence of dust	dust-protected	IP5X	
	Dust conductible	dusttight	IP6X	
	Humidity / water			
	Dripping water		IPX1	
	Occasional cleaning around the distribution board, impact by diverted water		IPX4	
	Functional cleaning around the distribution board, impact by diverted water		IPX5	
	Temporary immersion		IPX7	
	Room air conditioned / temperature range	-5 to +35 °C	Indicate the power loss of the ASSEMBLY for the dimensioning of the air-conditioning	
Room ventilated / temperature range, relative humidity	-5 to +35 °C 90 % at 20 °C, up to 50 % at 40 °C	Indicate the power loss of the ASSEMBLY for ventilation dimensioning; and state the room size. Higher ambient air temperatures are to be taken into account in the planning of ASSEMBLIES		

3 Installation and ambient conditions of ASSEMBLIES

Conditions of use	Information provided by the planner / customer	Measures/recommendations of the ASSEMBLY manufacturer		Selection
		Definition pursuant to standard IEC 61439-1	This information is to be taken into account in the planning of ASSEMBLIES	
Outdoor installation	Protected installation / temperature range, relative humidity (against rain, sunshine and wind)	-25 to +35 °C 90 % at 20 °C, up to 50 % at 40 °C, short term up to 100 % at 25 °C	Possible measures against moderate condensation due to temperature variations: Ventilating, heating, air conditioning	
	Foreign bodies / dust	not less than IP2X	For increased dust production use a higher degree of protection such as IP5X	
	Humidity / water	not less than IPX1	The manufacturer states the suitability of the protected installation, if necessary by applying additional measures	
	Unprotected installation / temperature range rel. humidity	-25 to +35 °C 90 % at 20 °C, up to 50 % at 40 °C, short term up to 100 % at 25 °C	Higher ambient air temperatures which might result from direct sunlight are to be taken into account in the planning of ASSEMBLIES Possible measures against moderate condensation due to temperature variations: Ventilating, heating, air conditioning	
	Direct sunlight	UV resistance	Follow manufacturer's instructions	
	Foreign bodies / dust	not less than IP2X	For increased dust production use a higher degree of protection such as IP5X	
	Humidity / water	not less than IPX1	The manufacturer states the suitability of the protected installation, if necessary by applying additional measures	

3 Installation and ambient conditions of ASSEMBLIES

Conditions of use	Information provided by the planner / customer	Measures/recommendations of the ASSEMBLY manufacturer		Selection
		Definition pursuant to standard IEC 61439-1	This information is to be taken into account in the planning of ASSEMBLIES	
Dimensions for transport and installation	Type of installation: To the wall (recess), to the wall, free installation to base frame, double floor	None		----- ----- -----
	Aisle widths / escape routes: Room dimensions and access doors	See DIN VDE 0100-729	Minimum aisle widths and the direction of the escape routes are to be taken into account in the planning of ASSEMBLIES	
	Distribution board: max. dimensions: W x H x D max. weight	None	Possible restrictions are to be stated	W ----- H ----- D ----- kg -----
	Transport: max. transport dimensions W x H x D, max. transport weight Transport type, e.g. crane Accessibility at the construction site	None	Possible restrictions are to be stated, such as only standing transport, max. acceleration values	W ----- H ----- D ----- kg -----
Chemical influences		None	Type of the enclosure material Chemical device version Special installation / ventilation	
Mechanical impact		Sub-distribution board Indoor installation Outdoor installation		IK05 IK07
Enclosure material	Sheet steel Plastic	None		
Enclosure colour			Comply with customer specifications / tender documents	
EMC	Environment A Non-public or industrial LV networks / areas / installations including strong sources of interference		Confirmation by the manufacturer in accordance with environment A	
	Environment B Public LV networks such as domestic, commercial and light industrial locations		Confirmation by the manufacturer in accordance with environment B	

4 Operating and servicing

Characteristics	Information provided by the planner / customer	Information provided by the manufacturer	Selection
Operation through:	Skilled person (electrically) Instructed person Ordinary persons	IPXXB IPXXB IPXXC	
Device activation	Behind the door / cover From outside		
Access / door closure	Lock For semi-cylinder (central locking system) Other		