Contents **Page**

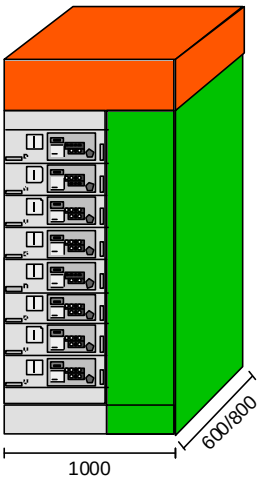
General

The cubicles for motor and cable feeders in withdrawable unit design offer highest operating comfort with optimum safety and availability. By virtue of the guiding withdrawable principle easy and rapid changes or adaptations are possible. Thus individual modules can be e.g. supplemented or exchanged or even compartments may be converted during operation

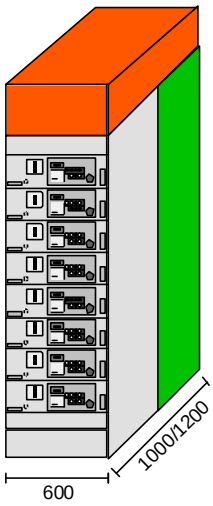
Structure and Functions

The switching device compartment has a height of 1700 mm and is intended to accommodate max. 17 withdrawable units. The cable connection compartment is located optionally at front or rear side.

Cable connection right-hand side (minimum cubicle depths)



Cable connection rear



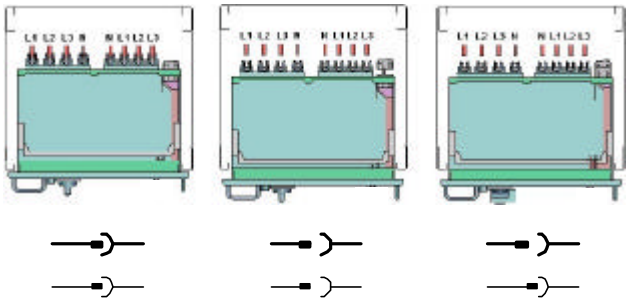
Withdrawable units up to 630 A/feeder

OFW

The withdrawable units feature a moving isolating contact system for the main circuit (interruption on the incoming line and feeder ends) and for the auxiliary circuit (max. 40-pole + 1 bus connection). An operating error protection facility prevents movement of the isolating contacts under load. In the test position, proper functioning of the withdrawable unit can be tested in the load-free state ("cold run"). The test position requires feeding of the control voltage via the auxiliary contact. In test and disconnected position protection degree IP 30 is achieved.

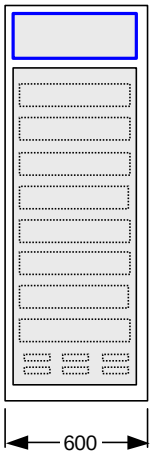
Withdrawable-Unit Principle

Connected position: Disconnected position: Test position:

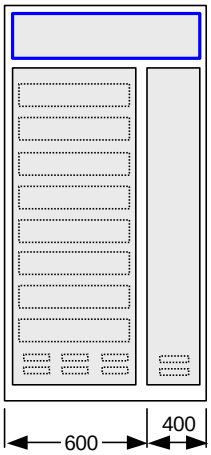


Forms of Internal Separation/Doors

According to the form of internal separation and the minimum protection degree the following types can be chosen.



Form 3b, 4b
non-ventilated ≤ IP 54
ventilated ≤ IP 42



Form 3b, 4b
non-ventilated ≤ IP 54
ventilated ≤ IP 42

Upgrade British Standard: 8PT24871, 8PT24872
Cable gland box each functional unit

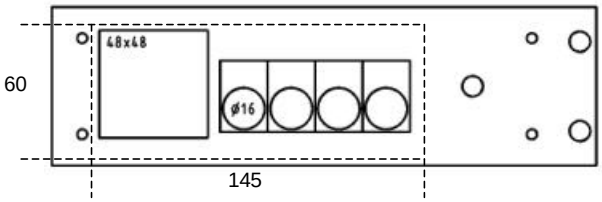
Installation of Instruments

The instrument panel can be equipped freely in the dotted area. The max. installation depth of instruments amounts to 75 mm in the area of bottom edge of instrument panel + 35 mm.

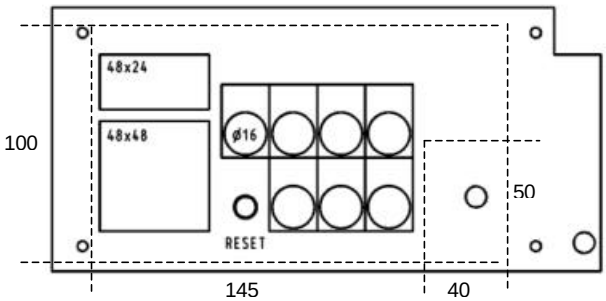
Component configuration examples (dimensions in mm):

- Actuating and signaling devices ; 16 mm
- Measuring instruments 48 x 48 mm
- Elapsed-hour meter 48 x 24 mm

Withdrawable-unit size 100 mm



Withdrawable-unit size 150 ... 700 mm



Optional Installations

Withdrawable unit coding: 8PT6983 (up to 10 coding possibilities)
Avoids the unintentional swapping of withdrawable units of the same size. (mechanical coding of compartments / withdrawable units)

Interlocking of test position: 8PT22728
Avoids the procedure of witdrawable units out of the test position.

Safety hook: 8PT24172
Avoids the inadvertent removal of the withtrawable units.

Withdrawable-Unit Contact System

Number of contacts per phase conductor	Rated current I_n [A]	Cut-off current $\hat{I}_D$ [kA]	I^2t [A^2s]
1	250	≈ 50	≈ 35 • 10^5
2	400	≈ 50	≈ 42 • 10^5
3	630	≈ 65	≈ 54 • 10^5

Withdrawable-Unit Position Signaling

Signal - Feeder available (AZV)
Signal - Test position

For this signal an additional signaling switch -S20 is configured in the withdrawable-unit.

Plug-On Bus System (3- and 4-pole)

The plug-on bus system with the phase conductors L1, L2, L3 (and N) is located at the rear left-side of the cubicle. By virtue of the protection against electric shock with tap-off openings protection degree IP 20 is achieved. Hence withdrawable-units can be replaced without having to shut down the system.

Rated Currents of Plug-On Bus System

Cross-section	Rated current I_n as a function of ambient temperature [A]						
	20°	25°	30°	**35°**	40°	45°	50°
Cubicle non-ventilated							
40x10	755	735	720	**700**	680	660	640
60x10	1075	1050	1025	**1000**	975	945	920
Cubicle ventilated							
40x10	880	860	840	**820**	800	775	750
60x10	1260	1230	1200	**1170**	1140	1105	1075

Short-circuit strength
40 x 10: I_{pk} = 125 kA I_{cw} = 50 kA, 1 s
60 x 10: I_{pk} = 163 kA I_{cw} = 65 kA, 1 s; 50 kA, 3 s

PE-, PEN- and N-bars are installed in the cable connection compartment. In the case of 4 poles switched outgoing feeders, the N conductor is routed in the housing of the plug-on bus system.

PE cross-section: 1x40x5
PEN, N cross-section: 1x40x10 or 2x40x10

Cable Connection Compartment

The cable connection compartment is located at the right-hand side (400 mm wide) with cable connection front or at rear (600 mm wide) with cable connection rear.

Electrical Connections OFW

The given cross-sections and loads in the charts below are guidance values. The project-related data may differ depending on the type of terminals used, on cable type, kind of cable routing and environmental conditions. The rated operational currents are based on the given cross-sections for copper 4-core cables NYY. If there are given two rated operational currents in one line the smaller value correlates to the smaller of the given cross-sections.

Auxiliary circuit of withdrawable-units up to 10 A/250 V to terminals

Terminal designation	Terminal size [mm²]	Cross-section [mm²]
8WA1011	4	1,5 ^{RE} - 4 ^{RE}

Main circuit of withdrawable-units up to 160 A to terminals

I_r [1] Withdr. unit [A]	Terminal designation	Terminal size [mm²]	Cross-section [mm²]
15 - 70 [1) 3)] 12 - 65 [2)]	8WA1011	16 [2)]	1,5 ^{RE} - 25 ^{SM}
46 - 150 [1) 3)] 36 - 150 [2)]	8WA1...4	70 [2)]	10 ^{RE} - 95 ^{SM}
101 – 250 [1)] 81 – 202 [2)]	8WA1...6	95 [2)]	35 ^{RE} - 150 ^{SM}

[1)] current carrying capacity 80 %
[2)] current carrying capacity 64 %
[3)] above value limited by rated current of the terminal
^{RE} = round, single-wire
^{SM} = sector, stranded conductor

Cable connection compartment at the front
Main circuit of withdrawable-units above 160 A

Compartment configuration up to [A]		Rated operational current I_R [A]	No. of cables per pole	Connectable cable cross-section [mm²]	Capacity utilisation of cross-section [1)]
3-pol. 4-pol.	400	130 400 [2)]	2 2	25 min. 240 max.	 47 %
6-pol.	400	130 400 [2)]	2 2	25 min. 185 max.	 55 %
3-pol. 4-pol. 6-pol.	400	340 275	1	240	80 % 64 %
	400	400 315	1	300 max. [3)]	80 % 64 %
3-pol. 4-pol.	630	380 305	2	95 min.	80 % 64 %
		630 550	2	240 max.	73 % 64 %
		580 455	2	120 min.	80 % 64 %
		630	3	240 max.	49 %

[1)] Capacity utilisation of the specified cross-section in % for 4-conductor NYY with installation in free air referring to the specified rated operational current
[2)] Limited by rated current of the terminal
[3)] Bending radius of single-core R = 8 x d, radius has to be formed before crimping the cable lug

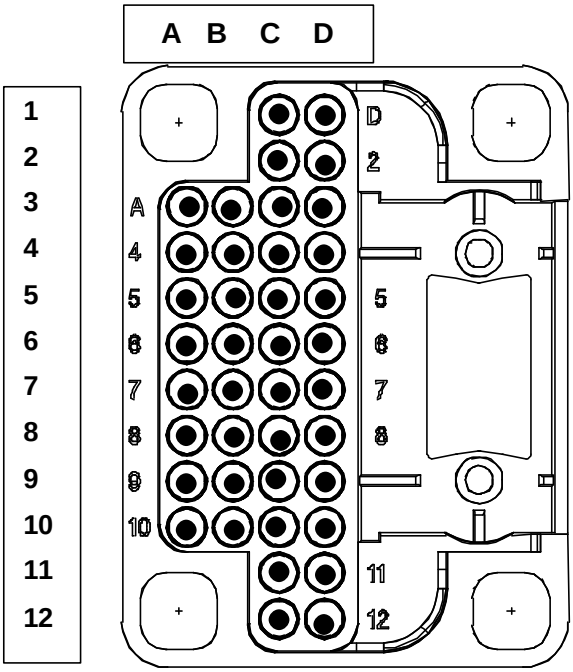
Cable connection compartment at the rear
Main circuit of withdrawable-units above 160 A

Terminal version	Rated operational current I_R [A]	No. of cables per pole	Connectable cable cross-section [mm²]	Capacity utilisation of cross-section [1)]
3-pole 4-pole 6-pole	130 400	2 2	25 min. 240 max.	64 % 47 %
	340 275	1	240	80 % 64 %
	400 315	1	300 max. [2)]	80 % 64 %
	380 305	2	95 min.	80 % 64 %
	630 550	2	240	73 % 64 %
	630	2	300 max. [2)]	64 %

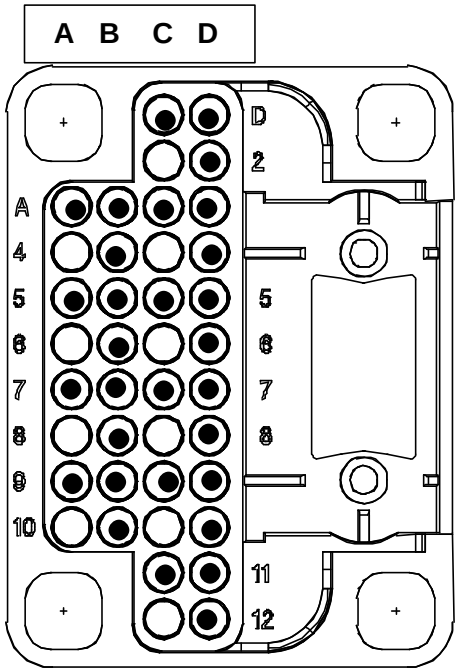
[1)] Capacity utilisation of the specified cross-section in % for 4-conductor NYY with installation in free air referring to the specified rated operational current
[2)] Bending radius of single-core R = 8 x d, radius has to be formed before crimping the cable lug

Auxiliary contacts for withdrawable-units
Type: 40-pole
Marking: alphanumeric A3 up to D12 in the withdrawable-unit

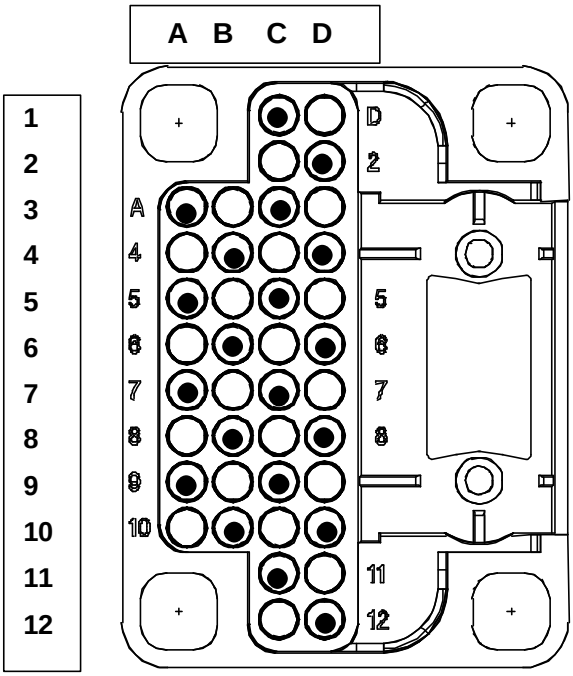
Connector pin assignment up to 250 V



Connector pin assignment up to 500 V



Connector pin assignment up to 690 V



Rated Currents of Outgoing Cable Feeders

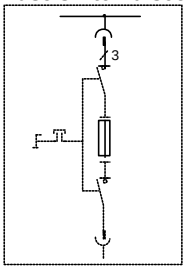
Device Type	Rated current [A]	Rated current I_n as a function of ambient temperature [A]* non-ventilated 20°	25°	30°	**35°**	40°	45°	50°	ventilated 20°	25°	30°	**35°**	40°	45°	50°
Feeders non-fused 3 pole / 4 pole															
3RV102	25	22	21	20,5	**20**	19	18,5	17,5	23	22,5	21,5	**21**	20	19,5	18,5
3RV103	50	41	40	38,5	**37,5**	36	34,5	33	45,5	44	42,5	**41**	39,5	38	36,5
3RV104	100	82,5	80	77,5	**75**	72	69,5	66,5	89,5	87	84	**81,5**	78,5	75,5	72
3VF3	225	135	131	127	**122**	118	113	109	152	147	143	**138**	133	128	122
3VF4	250	214	207	201	**195**	188	180	173	228	221	215	**208**	201	192	185
3VF5	400	265	260	249	**241**	232	223	214	315	305	295	**285**	275	265	255
3VF6	630	455	445	430	**415**	400	385	365	535	520	505	**485**	470	450	430
3VL1	160														
3VL2	160														
3VL3	250														
3VL4	400														
3VL5	630														
Fused feeders 3-pole / 4-pole															
3LD22 [1]	25	25	25	25	**25**	24	23	22,5	25	25	25	**25**	24	23	22,5
3KL50	63	63	63	62	**60,5**	58,5	56,5	54,5	63	63	63	**63**	63	62	60
3KL52	125	105	101	98	**94,5**	90,5	87	82,5	116	112	108	**104**	100	96	91,5
3KL53	160	125	122	119	**116**	113	109	106	138	134	131	**128**	124	120	116
3KL55	250	217	212	207	**202**	196	189	184	234	227	222	**217**	210	203	196
3KL57	400	285	278	271	**265**	258	248	242	312	303	296	**290**	280	272	262
3KL61	630	398	389	379	**370**	360	347	338	463	450	440	**430**	416	403	390

Values for 3VL not available yet
Approximate values for 3VL as 3VF

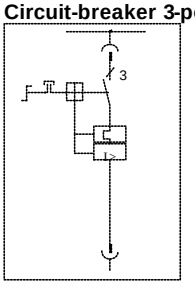
*Rated Currents of middle installation position
[1] only 3 pole

Space Requirement for Outgoing Cable Feeders

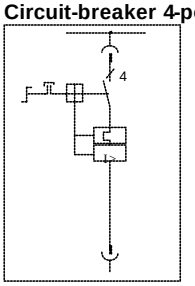
Fuse switch-disconnector



Circuit-breaker 3-pole

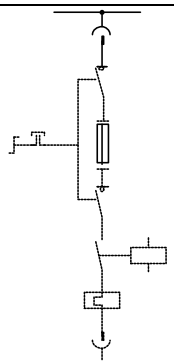
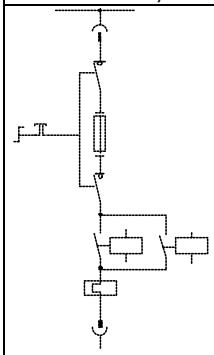
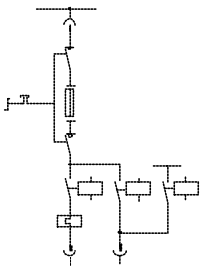


Circuit-breaker 4-pole

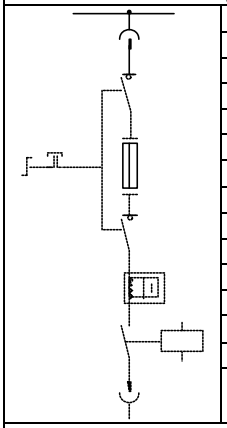
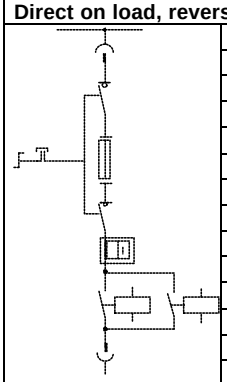


Rated current [A]	Type	Module height [mm]
Non-fused cable feeders 3 pole / 4 pole		
25	3RV102	100
50	3RV103	150
100	3RV104	150
225	3VF3	200
250	3VF4	300
400	3VF5	300
630	3VF6	600
160	3VL1	200
160	3VL2	200
250	3VL3	300
400	3VL4	300
630	3VL5	600
Fused cable feeders 3 pole		
25	3LD22	100
63	3KL50	150
125	3KL52	150
160	3KL53	200
250	3KL55	300
400	3KL57	300
630	3KL61	400
Fused cable feeders 4 pole		
63	3KL50	150
125	3KL52	150
160	3KL53	200
250	3KL55	300
400	3KL57	300
630	3KL61	500

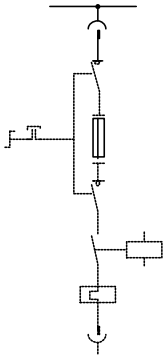
Motor Feeders, Fused 400 V

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	5,5	12	3LD22	3RT101		3RU111	100
	11	21	3LD22	3RT102		3RU112	100
	22	43	3KL5230	3RT103		3RU113	150
	45	83	3KL5230	3RT104		3RU114	300
	90	157	3KL5530	3RT105		3RB105	400
	132	233	3KL5530	3RT106		3RB106	400
	160	280	3KL5730	3RT106		3RB106	500
	250	420	3KL6130	3RT107		3RB106	600
	With contactor type 3TF						
	55	99	3KL5530	3TF50		3UA60	400
	75	133	3KL5530	3TF51		3UA61	400
	90	157	3KL5530	3TF52		3UA62	500
	110	195	3KL5530	3TF53		3UA66	500
	132	233	3KL5730	3TF54		3UA66	500
	160	280	3KL5730	3TF55		3UA66	500
	200	340	3KL6130	3TF56		3UA66	600
	250	420	3KL6130	3TF57		3UA68	600
Direct on load, reversing							
	5,5	12	3LD22	3RT101		3RU111	100
	11	21	3LD22	3RT102		3RU112	100
	22	43	3KL5230	3RT103		3RU113	200
	45	83	3KL5230	3RT104		3RU114	300
Star-delta connection							
	15	28	3KL5030	3RT102	3RT102	3RU112	200
	30	57	3KL5030	3RT103	3RT103	3RU113	200
	37	68	3KL5230	3RT103	3RT103	3RU113	200
	55	99	3KL5230	3RT104	3RT104	3RU114	300
	75	133	3KL5330	3RT104	3RT103	3RB104	300
	90	157	3KL5530	3RT104	3RT104	3RB104	400
	132	233	3KL5530	3RT105	3RT104	3RB105	500
	160	280	3KL5730	3RT105	3RT104	3RB105	500
	200	340	3KA5730	3RT106	3RT105	3RB106	700
	250	420	3KA5830	3RT126	3RT105	3RB106	700

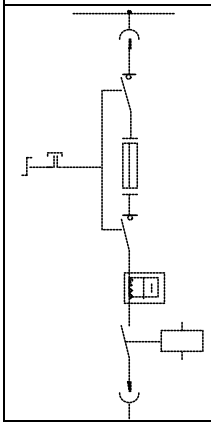
Motor Feeders, Fused, 400 V - with SIMOCODE

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	2,2	5	3LD22	3RT101		3UF5001	100
	4	8,8	3LD22	3RT101		3UF5011	100
	11	21	3LD22	3RT102		3UF5011	100
	18,5	36	3KL5030	3RT103		3UF5021	150
	45	83	3KL5230	3RT104		3UF5021	300
	55	99	3KL5530	3RT105		3UF5021	400
	90	157	3KL5530	3RT105		3UF5031	400
	110	195	3KL5530	3RT106		3UF5031	500
	132	233	3KL5530	3RT106		3UF5041	500
	160	280	3KL5730	3RT106		3UF5041	500
	250	420	3KL6130	3RT107		3UF5041	600
Direct on load, reversing							
	2,2	5	3LD22	3RT101		3UF5001	100
	4	8,8	3LD22	3RT101		3UF5011	100
	11	21	3LD22	3RT102		3UF5011	100
	18,5	36	3KL5030	3RT103		3UF5021	200
	45	83	3KL5230	3RT104		3UF5021	300

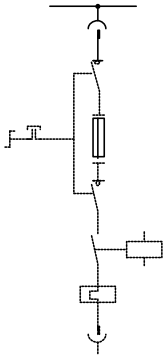
Motor feeders, fused 500 V

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Typ	Y	Overload relay Typ	Module height [mm]
Direct on load starting							
	4	6,7	3LD22	3RT101		3RU111	100
	11	17	3LD22	3RT102		3RU112	100
	30	46	3KL5030	3RT103		3RU113	150
	37	55	3KL5030	3RT104		3RU114	150
	55	79	3KL5230	3RT104		3RU114	300
	110	156	3KL5530	3RT105		3RB105	400
	160	224	3KL5530	3RT106		3RB106	400
	200	275	3KL5730	3RT106		3RB106	500
	315	425	3KL6130	3RT107		3RB106	600

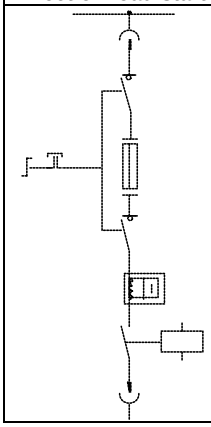
Motor feeders, fused, 500 V - with SIMOCODE

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Typ	Contactor(s) Typ	Y	Overload relay Typ	Module height [mm]
Direct on load starting							
	3	5,3	3LD22	3RT101		3UF5001	100
	4	6,7	3LD22	3RT101		3UF5011	100
	11	17	3LD22	3RT102		3UF5011	100
	15	22	3KL5030	3RT103		3UF5011	150
	30	46	3KL5030	3RT103		3UF5021	150
	37	55	3KL5030	3RT104		3UF5021	200
	55	79	3KL5230	3RT104		3UF5021	300
	110	156	3KL5530	3RT105		3UF5031	400
	132	186	3KL5530	3RT106		3UF5031	500
	160	224	3KL5530	3RT106		3UF5041	500
	200	275	3KL5730	3RT106		3UF5041	500
	250	335	3KL6130	3RT107		3UF5041	600
	315	425	3KL6130	3RT107		3UF5041	600

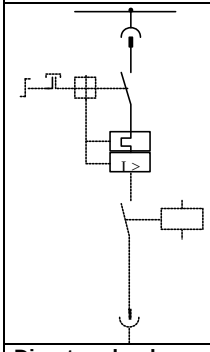
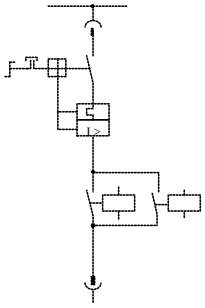
Motor feeders, fused, 690 V

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	5,5	6,3	3LD22	3RT101		3RU111	100
	11	12,4	3LD22	3RT102		3RU112	100
	18,5	21	3KL5030	3RT103		3RU113	150
	22	24	3KL5230	3RT103		3RU113	150
	30	33	3KL5230	3RT104		3RU114	300
	45	47	3KL5530	3RT104		3RU114	300
	160	165	3KL5530	3RT105		3RB105	400
	200	204	3KL5530	3RT106		3RB106	400
	250	262	3KL5730	3RT106		3RB106	500
	400	397	3KL6130	3RT107		3RB106	600

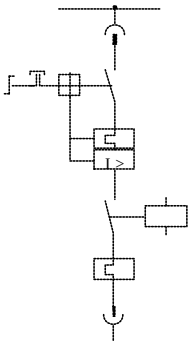
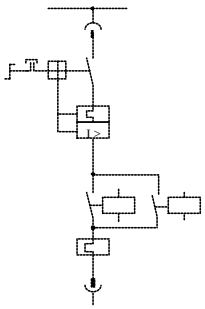
Motor feeders, fused, 690 V - with SIMOCODE

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	4	4,8	3LD22	3RT101		3UF5001	100
	5,5	6,3	3LD22	3RT101		3UF5011	100
	11	12,4	3LD22	3RT102		3UF5011	100
	18,5	21	3KL5030	3RT103		3UF5011	150
	22	24	3KL5230	3RT103		3UF5011	150
	30	33	3KL5230	3RT104		3UF5021	300
	45	47	3KL5530	3RT104		3UF5021	300
	90	94	3KL5530	3RT105		3UF5021	400
	160	165	3KL5530	3RT105		3UF5031	400
	200	204	3KL5530	3RT106		3UF5031	500
	250	262	3KL5730	3RT106		3UF5041	500
	400	397	3KL6130	3RT107		3UF5041	600

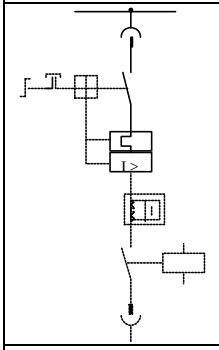
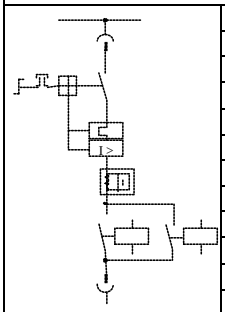
Motor Feeders, Non-Fused, 400 V - Type 1 at 50 kA with Overload Protection with Circuit-Breaker (Economical Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	11	21	3RV102	3RT102			100
	22	43	3RV103	3RT103			150
	45	83	3RV104	3RT104			150
	55	99	3VF31	3TF50			300
	75	133	3VF32	3TF51			300
	90	157	3VF32	3TF52			300
	110	195	3VF33	3TF53			300
	132	233	3VF51	3TF54			500
	160	280	3VF51	3TF55			500
	200	340	3VF61	3TF56			600
	250	420	3VF61	3TF57			600
Direct on load, reversing							
	11	21	3RV102	3RT102			100
	22	43	3RV103	3RT103			150
	45	83	3RV104	3RT104			300

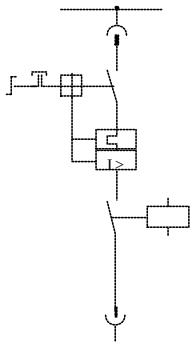
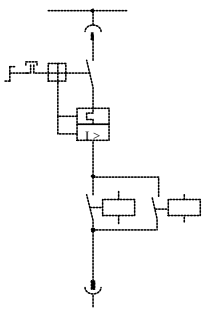
Motor Feeders, Non-Fused, 400 V - Type 1 at 50 kA with Overload Relay (Economical Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	5,5	12	3RV132	3RT101		3RU111	100
	11	21	3RV132	3RT102		3RU112	100
	22	43	3RV133	3RT103		3RU113	150
	45	83	3RV134	3RT104		3RU114	150
	55	99	3VF31	3TF50		3UA60	300
	75	133	3VF32	3TF51		3UA61	300
	90	157	3VF32	3TF52		3UA62	400
	110	195	3VF33	3TF53		3UA66	400
	132	233	3VF52	3TF54		3UA66	500
	160	280	3VF52	3TF55		3UA66	500
	200	340	3VF62	3TF57		3UA66	600
	250	420	3VF62	3TF57		3UA68	600
Direct on load reversing							
	5,5	12	3RV132	3RT101		3RU111	100
	11	21	3RV132	3RT102		3RU112	100
	22	43	3RV133	3RT103		3RU113	150
	45	83	3RV134	3RT104		3RU114	300

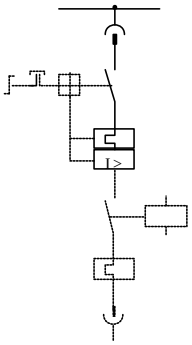
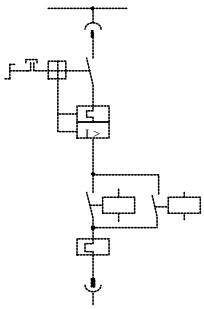
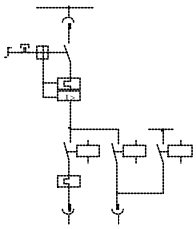
Motor Feeders, Non-Fused, 400 V - Type 1 at 50 kA with SIMOCODE (Economical Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	2,2	5	3RV132	3RT101		3UF5001	100
	4	8,8	3RV132	3RT101		3UF5011	100
	11	21	3RV132	3RT102		3UF5011	100
	18,5	36	3RV133	3RT103		3UF5021	150
	45	83	3RV134	3RT104		3UF5021	200
Direct on load reversing							
	2,2	5	3RV132	3RT101		3UF5001	100
	4	8,8	3RV132	3RT101		3UF5011	100
	11	21	3RV132	3RT102		3UF5011	100
	18,5	36	3RV133	3RT103		3UF5021	150
	45	83	3RV134	3RT104		3UF5021	300

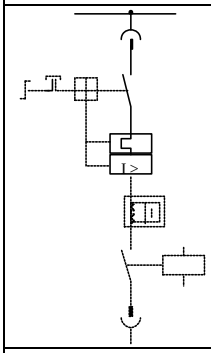
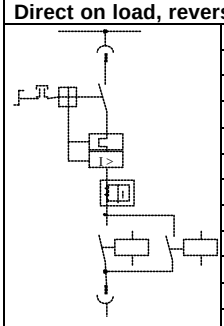
Motor feeder, non-fused, 400 V - Type 2 at 50 kA with Overload Protection with Circuit-Breaker (Convenience Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	Type	Main switch Type	Contactor(s) Y	Type	Overload relay Type	Module height [mm]
Direct on load starting							
	7,5	15	3RV102	3RT102			100
	22	43	3RV103	3RT103			150
	45	83	3RV104	3RT104			150
	55	99	3VF31	3RT105			300
	90	157	3VF32	3RT105			300
	110	195	3VF33	3RT106			300
	160	280	3VF51	3RT106			500
	250	420	3VF61	3RT107			600
	with contactor type 3TF						
	55	99	3VF31	3TF52			300
	90	157	3VF32	3TF52			300
	110	195	3VF33	3TF53			300
	132	233	3VF51	3TF54			500
	160	280	3VF51	3TF55			500
	200	340	3VF61	3TF56			600
	250	420	3VF61	3TF57			600
Direct on load reversing							
	7,5	15	3RV102	3RT102			100
	22	43	3RV103	3RT103			150
	45	83	3RV104	3RT104			300

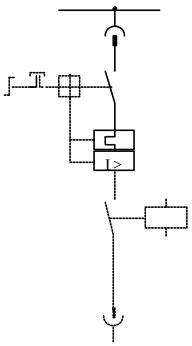
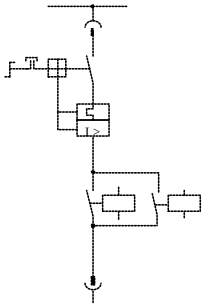
Motor Feeders, Non-Fused, 400 V - Type 2 at 50 kA with Overload Relay (Convenience Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	0,55	1,5	3RV132	3RT101		3RU111	100
	7,5	15	3RV132	3RT102		3RU112	100
	22	43	3RV133	3RT103		3RU113	150
	45	83	3RV134	3RT104		3RU114	150
	55	99	3VF31	3RT105		3RB105	400
	90	157	3VF32	3RT105		3RB105	400
	110	195	3VF42	3RT106		3RB106	400
	160	280	3VF51	3RT106		3RB106	500
	250	420	3VF61	3RT107		3RB106	600
	with conductor type 3TF						
	55	99	3VF31	3TF52		3UA62	400
	90	157	3VF32	3TF52		3UA62	400
	110	195	3VF33	3TF53		3UA66	400
	132	233	3VF52	3TF54		3UA66	500
	160	280	3VF52	3TF55		3UA66	500
	200	340	3VF62	3TF57		3UA66	600
	250	420	3VF62	3TF57		3UA68	600
Direct on load reversing							
	0,55	1,5	3RV132	3RT101		3RU111	100
	7,5	15	3RV132	3RT102		3RU112	100
	22	43	3RV133	3RT103		3RU113	150
	45	83	3RV134	3RT104		3RU114	300
Star-delta connection							
	7,5	15	3RV132	3RT102	3RT102	3RU112	200
	22	43	3RV133	3RT103	3RT102	3RU113	200
	30	57	3RV134	3RT104	3RT102	3RU114	300
	45	83	3RV134	3RT104	3RT103	3RU114	300

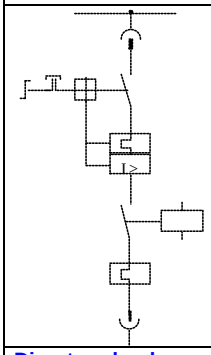
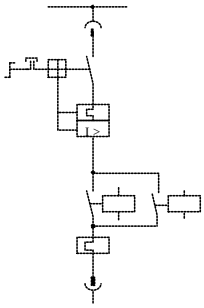
Motor Feeders, Non-Fused, 400 V - Type 2 at 50 kA with SIMOCODE (Convenience Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	0,55	1,5	3RV132	3RT101		3UF5001	100
	7,5	15	3RV132	3RT102		3UF5011	100
	18,5	36	3RV133	3RT103		3UF5021	150
	45	83	3RV134	3RT104		3UF5021	200
	55	99	3VF31	3RT105		3UF5031	300
	90	157	3VF32	3RT105		3UF5031	300
	110	195	3VF42	3RT106		3UF5041	400
	160	280	3VF51	3RT106		3UF5041	500
	250	420	3VF61	3RT107		3UF5041	600
Direct on load, reversing							
	0,55	1,5	3RV132	3RT101		3UF5001	100
	7,5	15	3RV132	3RT102		3UF5011	100
	18,5	36	3RV133	3RT103		3UF5021	150
	45	83	3RV134	3RT104		3UF5021	300

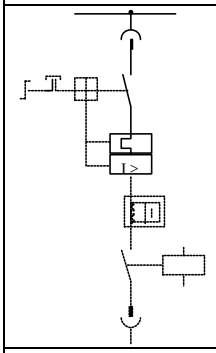
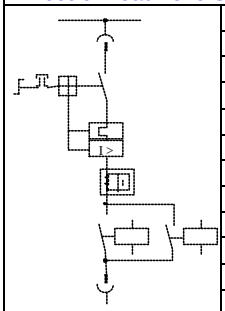
Motor feeders, Non-Fused, 500 V - Type 2 at 50 kA with Overload Protection with Circuit-Breaker (Convenience Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	1,1	2,1	3RV102	3RT102			100
	5,5	9,1	3RV102	3RT103			100
	30	46	3RV103	3RT103			150
	55	79	3RV104	3RT104			200
	90	128	3VF32	3RT105			300
	110	156	3VF33	3RT105			300
	132	186	3VF33	3RT106			300
	160	224	3VF51	3RT106			500
	200	275	3VF61	3RT106			600
	315	425	3VF61	3RT107			600
	with conductor type 3TF						
	110	156	3VF32	3TF52			300
	132	186	3VF33	3TF53			300
	160	224	3VF51	3TF54			500
	200	275	3VF51	3TF55			500
	250	335	3VF61	3TF56			600
	315	425	3VF61	3TF57			600
Wendeschaltung							
							

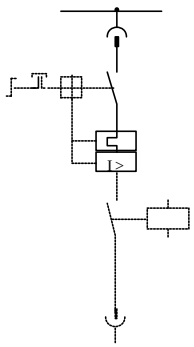
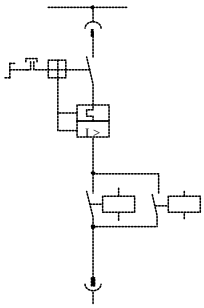
Motor Feeders, Non-Fused, 500 V - Type 2 at 50 kA with Overload Relay (Convenience Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	110	156	3VF32	3RT105		3RB105	400
	132	186	3VF42	3RT106		3RB105	400
	200	275	3VF51	3RT106		3RB106	500
	315	425	3VF61	3RT107		3RB106	600
	355	480	3VF61	3RT127		3RB106	600
Direct on load reversing							
							

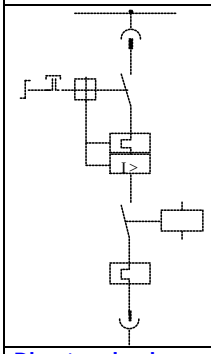
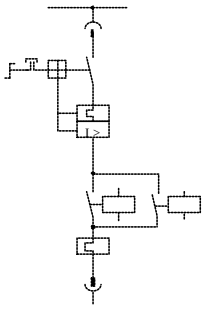
Motor Feeders, Non-Fused, 500 V - Type 2 at 50 kA with SIMOCODE (Convenience Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	110	156	3VF32	3RT105		3UF5031	300
	132	186	3VF42	3RT106		3UF5031	400
	200	275	3VF51	3RT106		3UF5041	500
	315	425	3VF61	3RT107		3UF5041	600
	355	480	3VF61	3RT127		3UF5041	600
Direct on load reversing							
							

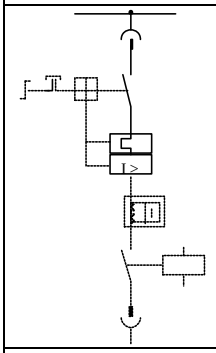
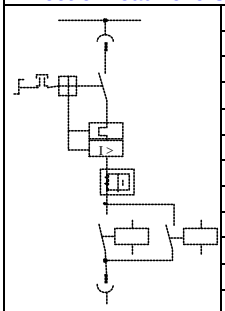
Motor feeders, Non-Fused, 690 V - Type 2 at 50 kA with Overload Protection with Circuit-Breaker (Convenience Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	1,1	1,43	3RV102	3RT102			100
	11	12,4	3RV132/102	3RT102			200
	22	24	3RV133/103	3RT103			200
	45	47	3RV133/103	3RT104			200
	160	165	3VU203	3RT105			400
	250	262	3VU204	3RT126			600
	500	490	3VU205	3RT127			600
Wendeschaltung							
							

Motor Feeders, Non-Fused, 690 V - Type 2 at 50 kA with Overload Relay (Convenience Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	90	94	3VU231	3RT105		3RB105	400
	160	165	3VU232	3RT105		3RB105	400
	200	204	3VU233	3RT106		3RB106	400
	250	262	3VU234	3RT126		3RB106	600
	315	308	3VU234	3RT127		3RB106	600
	500	490	3VU235	3RT127		3RB106	600
Direct on load reversing							
							

Motor Feeders, Non-Fused, 690 V - Type 2 at 50 kA with SIMOCODE (Convenience Solution)

Connection	Rated data (AC-2/AC-3) P_n [kW]	I_e [A]	Main switch Type	Contactor(s) Type	Y	Overload relay Type	Module height [mm]
Direct on load starting							
	90	94	3VU231	3RT105		3UF5031	400
	160	165	3VU232	3RT105		3UF5031	400
	200	204	3VU233	3RT106		3UF5031	400
	250	262	3VU234	3RT126		3UF5041	600
	315	308	3VU234	3RT127		3UF5041	600
	500	490	3VU235	3RT127		3UF5041	600
Direct on load reversing							
							

Hints for assembly accessories

Connection	Combination	Not mountable accessories	
		Main switch	Contactor
Outgoing cable feeder	3RV102	Signaling switch[1], Lateral auxiliary switch	-
Outgoing cable feeder	3RV104	Undervoltage and shunt release	-
Direct on load starting	3RV102 + 3RT102	Signaling switch[1], Lateral auxiliary switch	-
Direct on load starting	3RV102 + 3RT103	Signaling switch[1], Lateral auxiliary switch	4 pole snap-mounting auxiliary switch block located at the front
Direct on load starting	3RV104 + 3RT104	Undervoltage and shunt release	Mounting lateral auxiliary switch located at the right
Direct on load starting	3RV132 + 3RT101 + 3RU111	Signaling switch[1], Lateral auxiliary switch	-
Direct on load starting	3RV132 + 3RT102 + 3RU112	Signaling switch[1], Lateral auxiliary switch	-
Direct on load starting	3RV132 + 3RT101 + 3UF5001	Signaling switch[1], Lateral auxiliary switch	-
Direct on load starting	3RV132 + 3RT101 + 3UF5011	Signaling switch[1], Lateral auxiliary switch	-
Direct on load starting	3RV132 + 3RT102 + 3UF5011	Signaling switch[1], Lateral auxiliary switch	-
Direct on load starting	3RV132 + 3RV102 + 3RT102	Signaling switch[1] Lateral auxiliary switch to Q1	
Direct on load starting	3RV134 + 3RT104 + 3RU114	Undervoltage and shunt release	Mounting lateral auxiliary switch located at the right
Direct on load starting	3KL5030 + 3RT102 + 3RU112	-	Mounting lateral auxiliary switch located at the left
Direct on load starting	3KL50 + 3RT103 + 3RU113	-	Second lateral auxiliary switch located at the right

[1] Use main switch interlock 8PT21621 when installing the signal switch 3RV1921-1M.

Hints for assembly accessories

Connection	Combination	Not mountable accessories	
		Main switch	Contactor
Direct on load starting	3KL50 + 3RT104 + 3RU114	-	Second lateral auxiliary switch located at the right
Direct on load starting	3KL5530 + 3RT105 + 3UF5031	-	Second lateral auxiliary switch located at the right
Direct on load, reversing	3RV102 + 3RT102	Signaling switch[1)], Lateral auxiliary switch	4 pole snap-mounting auxiliary switch block located at the front
Direct on load, reversing	3RV103 + 3RT103	-	Snap-mounting auxiliary switch block located at the front
Direct on load, reversing	3RV132 + 3RT101 + 3RU111	Signaling switch[1)], Lateral auxiliary switch	-
Direct on load, reversing	3RV132 + 3RT102 + 3RU112	Signaling switch, Lateral auxiliary switch	Snap-mounting auxiliary switch block located at the front
Direct on load, reversing	3RV132 + 3RT101 + 3UF5001	Signaling switch[1)], Lateral auxiliary switch	-
Direct on load, reversing	3RV132 + 3RT101 + 3UF5011	Signaling switch[1)], Lateral auxiliary switch	-
Direct on load, reversing	3RV132 + 3RT102 + 3UF5011	Signaling switch[1)], Lateral auxiliary switch	Snap-mounting auxiliary switch block K2 located at the front
Direct on load, reversing	3RV133 + 3RT103 + 3RU113	-	Snap-mounting auxiliary switch block located at the front
Direct on load, reversing	3KL5030 + 3RT102 + 3RU112	-	Mounting lateral auxiliary switch
Direct on load, reversing	3NP35 + 3LD22 + 3RT102 + 3RU112	-	4 pole snap-mounting auxiliary switch block located at the front
Direct on load, reversing	3NP35 + 3LD22 + 3RT102 + 3UF5011	-	Snap-mounting auxiliary switch block located at the front

[1)] Use main switch interlock 8PT21621 when installing the signal switch 3RV1921-1M.

Hints for assembly accessories

Connection	Combination	Not mountable accessories	
		Main switch	**Contactor**
Star-delta connection	3RV132 + 3RT102 + 3RT102 + 3RU112	Signaling switch[1)], Lateral auxiliary switch	Mounting lateral auxiliary switch
Star-delta connection	3KL52 + 3RT1.3 + 3RT1.3 + 3RU1.3	-	Snap-mounting auxiliary switch block K2 located at the front
Star-delta connection	3KL50 + 3RT1.3 + 3RT1.3 + 3RU1.3	-	Snap-mounting auxiliary switch block to K2 located at the front
Star-delta connection	3KL52 + 3RT1.4 + 3RT1.4 + 3RU1.4	-	Snap-mounting auxiliary switch block located to K2 at the front
Star-delta connection	3KL5730 + 3RT105 + 3RT104 + 3RB1066	-	Second lateral auxiliary switch to K3 located at the right

[1)] Use main switch interlock 8PT21621 when installing the signal switch 3RV1921-1M.

Hints for SIMOCODE

Profibus - Communication: Baud rate limitation

The entire length of the single feeder in communication network (all bus-single feeder within the withdrawable units) have influence on the transmission speed for the Profibus-Communication.
Die admissible entire length of such single feeders is exceeded at a maximum segment configuration (30 participants) and can thus lead to communication problems.

Die maximum transmission speed for the Profibus-communication is therefore limited on **500 kBaud**.

The use of 1,5 Mbaud is admitted in exceptional cases under the following conditions:
- The limitation of the participants for each segment to 10-15 participants (depending on withdrawable unit size)
- No application of devices with segment-monitoring functions (special OLM's and diagnostic-repeater)
- Coordination of the bus design and of communication structure with A&D CD DM TPM in Leipzig