

Type 1 surge protector								
Network voltage	DS250VG	DS150VG	DS250E	DS150E	Protection mode	Type of network	Neutral configuration	Diagram (pages A10-A12)
230/400 V	DS250VG-300	DS150VG-300	DS250E-300	DS150E-300	Common mode	1-pole 230 V	-	-
	-	DS150VG-400	-	DS150E-400	Common mode	1-pole 400 V	-	-
	-	DS152VG-400	-	DS152E-400	Common mode	Single phase	TT - TN - IT	1
	DS252VG-300	DS152VG-300	DS252E-300	DS152E-300	Common mode	Single phase	TNS	1
	DS252VG-300/G	DS152VG-300/G	DS252E-300/G	DS152E-300/G	Common and differential mode	Single phase	TT - TNS	7
	DS253VG-300	DS153VG-300	DS253E-300	DS153E-300	Common mode	3-Phase	TNC	2
	-	DS153VG-400	-	DS153E-400	Common mode	3-Phase	TNC - IT	2
	-	DS154VG-400	-	DS154E-400	Common mode	3-Phase + N	TT - TN - IT	3
	DS254VG-300	DS154VG-300	DS254E-300	DS154E-300	Common mode	3-Phase + N	TNS	3
	DS254VG-300/G	DS154VG-300/G	DS254E-300/G	DS154E-300/G	Common and differential mode	3-Phase + N	TT - TNS	8
120/208 V	DS250VG-120	DS150VG-120	DS250E-120	DS150E-120	Common mode	1-pole 120 V	-	-
	DS252VG-120	DS152VG-120	DS252E-120	DS152E-120	Common mode	Single phase	TNS	1
	DS252VG-120/G	DS152VG-120/G	DS252E-120/G	DS152E-120/G	Common and differential mode	Single phase	TT - TNS	7
	DS253VG-120	DS153VG-120	DS253E-120	DS153E-120	Common mode	3-Phase	TNC	2
	DS254VG-120	DS154VG-120	DS254E-120	DS154E-120	Common mode	3-Phase + N	TNS	3
	DS254VG-120/G	DS154VG-120/G	DS254E-120/G	DS154E-120/G	Common and differential mode	3-Phase + N	TNS	8

Type 2 surge protector								
Network voltage	DS70R	DS40	DU40	DS10	Protection mode	Type of network	Neutral configuration	Diagram (pages A10-A12))
230/400 V	DS71R-230	DS41-230	DU41-230	DS11-230	Common mode	1-pole 230 V	-	-
	DS71R-400	DS41-400	DU41-400	DS11-400	Common mode	1-pole 400 V	-	-
	DS72R-400	DS42-400	DU42-400	DS12-400	Common mode	Single phase	TT - TN - IT	4
	DS72R-230	DS42-230	DU42-230	DS12-230	Common mode	Single phase	TNS	4
	DS72R-230/G	DS42-230/G	DU42-230/G	DS12-230/G	Common and differential mode	Single phase	TT - TN	9
	DS73R-230	DS43-230	DU43-231	DS13-230	Common mode	3-Phase	TNC	5
	DS73R-400	DS43-400	DU43-401	DS13-400	Common mode	3-Phase	TNC - IT	5
	DS74R-400	DS44-400	DU44-400	DS14-400	Common mode	3-Phase + N	TT - TN - IT	6
	DS74R-230	DS44-230	DU44-230	DS14-230	Common mode	3-Phase + N	TNS	6
	DS74R-230/G	DS44-230/G	DU44-230/G	DS14-230/G	Common and differential mode	3-Phase + N	TT - TNS	10
120/208 V	DS71R-120	DS41-120	DU41-120	DS11-120	Common mode	1-pole 120 V	-	-
	DS72R-120	DS42-120	DU42-120	DS12-120	Common mode	Single phase	TNS	4
	DS72R-120/G	DS42-120/G	DU42-120/G	DS12-120/G	Common and differential mode	Single phase	TT - TNS	9
	DS73R-120	DS43-120	DU43-120	DS13-120	Common mode	3-Phase	TNC	5
	DS74R-120	DS44-120	DU44-120	DS14-120	Common mode	3-Phase + N	TNS	6
	DS74R-120/G	DS44-120/G	DU44-120/G	DS14-120/G	Common and differential mode	3-Phase + N	TNS	10
Accessories	DSM70R-400	DSM40-400	-	DSM40-400	Plug-in 400 V module	-	-	-
	DSM70R-230	DSM40-230	-	DSM40-230	Plug-in 230 V module	-	-	-
	DSM70R-120	DSM40-120	-	DSM40-120	Plug-in 120 V module	-	-	-
	DSB12-400	DSB1-400	-	DSB1-400	Base for 1 plug-in 400 V module	-	-	-
	DSB12-230	DSB1-230	-	DSB1-230	Base for 1 plug-in 230 V module	-	-	-
	DSB12-120	DSB1-120	-	DSB1-120	Base for 1 plug-in 120 V module	-	-	-
	DSB12-S2-400	DSB1-S1-400	-	DSB1-S1-400	Base for 1 module 400 V+ remote signal	-	-	-
	DSB12-S2-230	DSB1-S1-230	-	DSB1-S1-230	Base for 1 module 230V + remote signal	-	-	-
	DSB12-S2-120	DSB1-S1-120	-	DSB1-S1-120	Base for 1 module 120V + remote signal	-	-	-

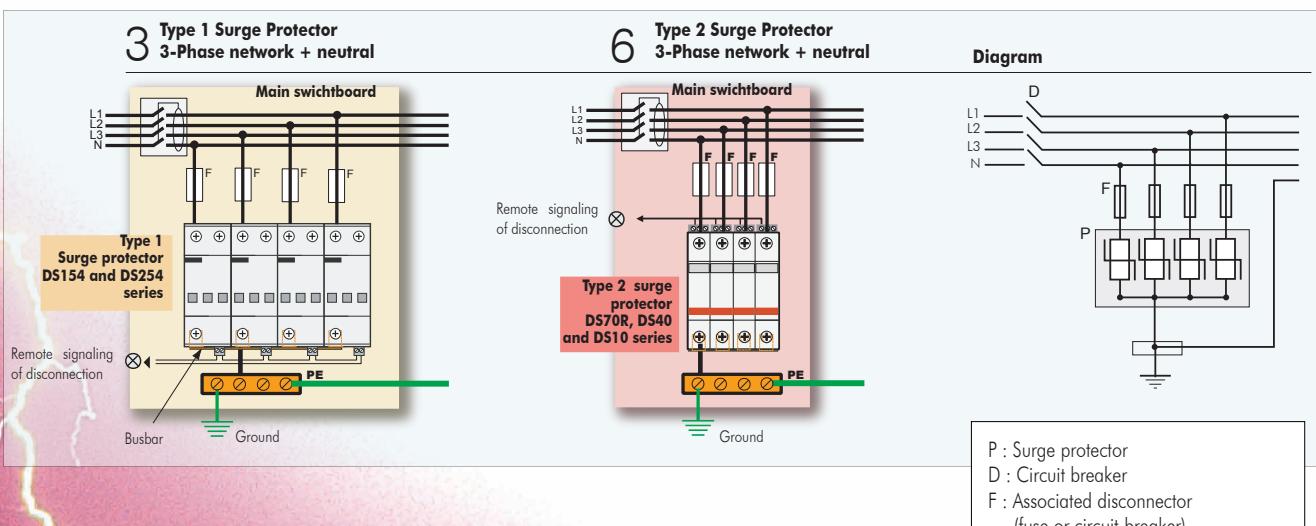
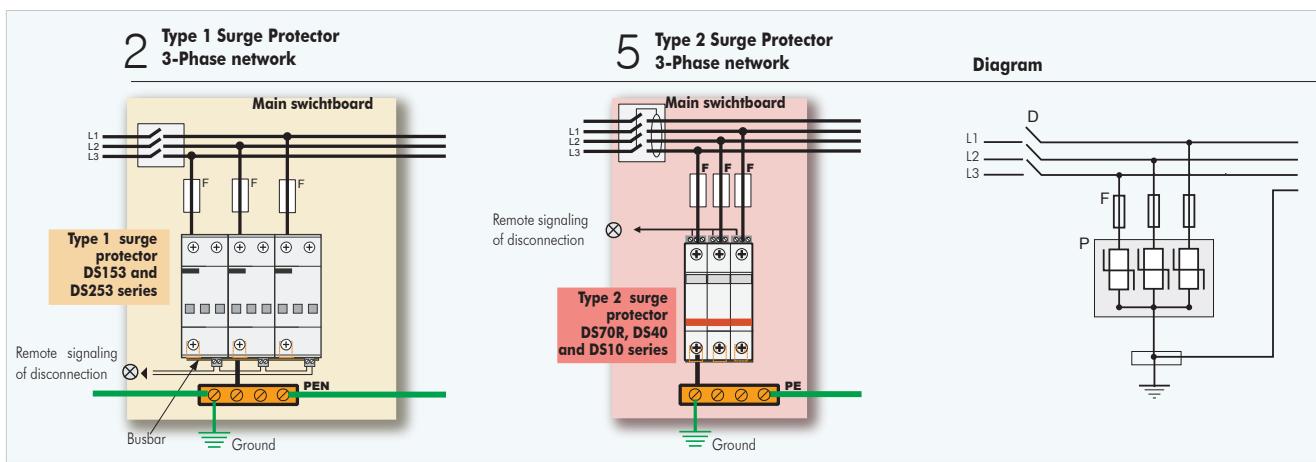
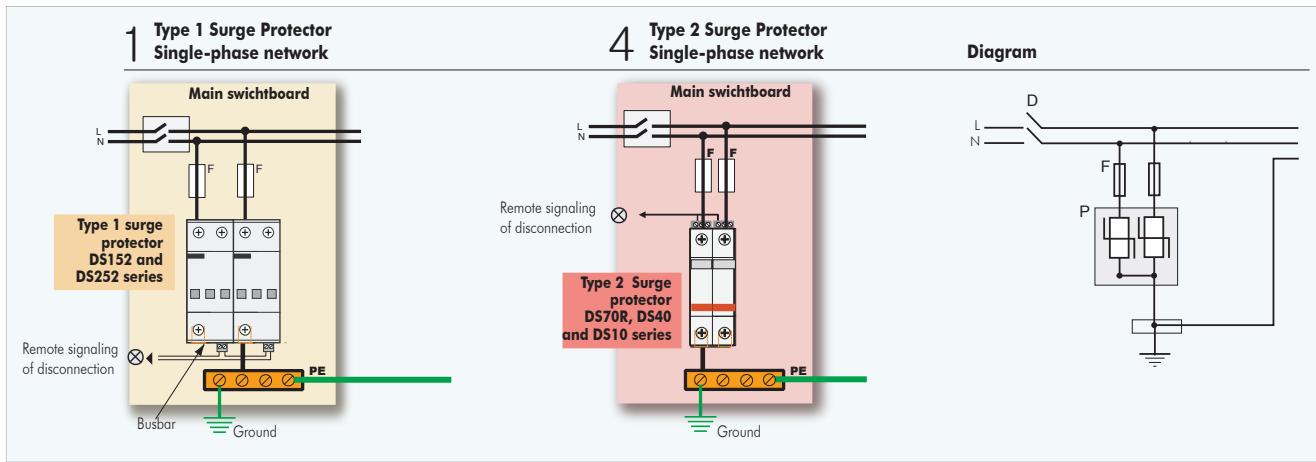
Type 2 (or Type 3) surge protector										
Network voltage	DUT40	DS230G	DS240	DUT10	DS210D	DS-HF	Protection mode	Type of network	Neutral configuration	Diagram (page A12))
230/400 V	-	-	DS240-400	-	-	-	Common mode	Single phase	TT - TN - IT	12
	-	DS230G-400	-	-	DS210D-400	DS-HF	Common and differential mode	Single phase	TT - TN - IT	12/11
	-	-	DS240-230	-	-	-	Common mode	Single phase	TNS	12
	-	DS230G-400	-	-	DS210D-230	-	Common and differential mode	Single phase	TNS	12
	DUT40-230/G	-	-	DUT10-230/G	-	-	Common and differential mode	3-Phase	TT - TNS	13
	-	-	2xDS240-400	-	-	-	Common mode	3-Phase + N	TT - TNS - IT	-
	DUT40-230/G	-	-	DUT10-230/G	-	-	Common and differential mode	3-Phase + N	TT - TNS	13
120/208 V	-	DS230G-120	DS240-120	-	DS210D-120	DS-HF-120	Common and differential mode	Single phase	TNS	12/11
-	-	2 x DS240-120	-	-	-	-	Common mode	3-Phase + N	TT - TNS	-
Accessories	-	DSM230G-400	DSM230-400	-	DSM210D-400	-	Plug-in 400 V module	-	-	-
	-	-	DSM230-230	-	DSM210D-230	-	Plug-in 230 V module	-	-	-
	-	DSM230G-120	DSM230-120	-	DSM210D-120	-	Plug-in 120 V module	-	-	-
	-	DSB2-400	DSB2-T2-400	-	DSB2-400	-	Base for 1 module 400 V	-	-	-
	-	-	DSB2-T2-230	-	DSB2-230	-	Base for 1 module 230 V	-	-	-
	-	DSB2-120	DSB2-T2-120	-	DSB2-120	-	Base for 1 module 120 V	-	-	-
	-	DSB2-S2-400	DSB2-T2-S2-400	-	DSB2-S2-400	-	Base for 1 module 400V + remote signal	-	-	-
	-	-	DSB2-T2-S2-230	-	DSB2-S2-230	-	Base for 1 module 230V + remote signal	-	-	-
	-	DSB2-S2-120	DSB2-T2-S2-120	-	DSB2-S2-120	-	Base for 1 module 120V + remote signal	-	-	-



# DS surge protectors wiring

## Common mode protection (CT1 connection)

Common mode (L/PE) protection provided by DS surge protectors in relation with the different types of AC network. Called CT1 connection type in IEC 60364 std.



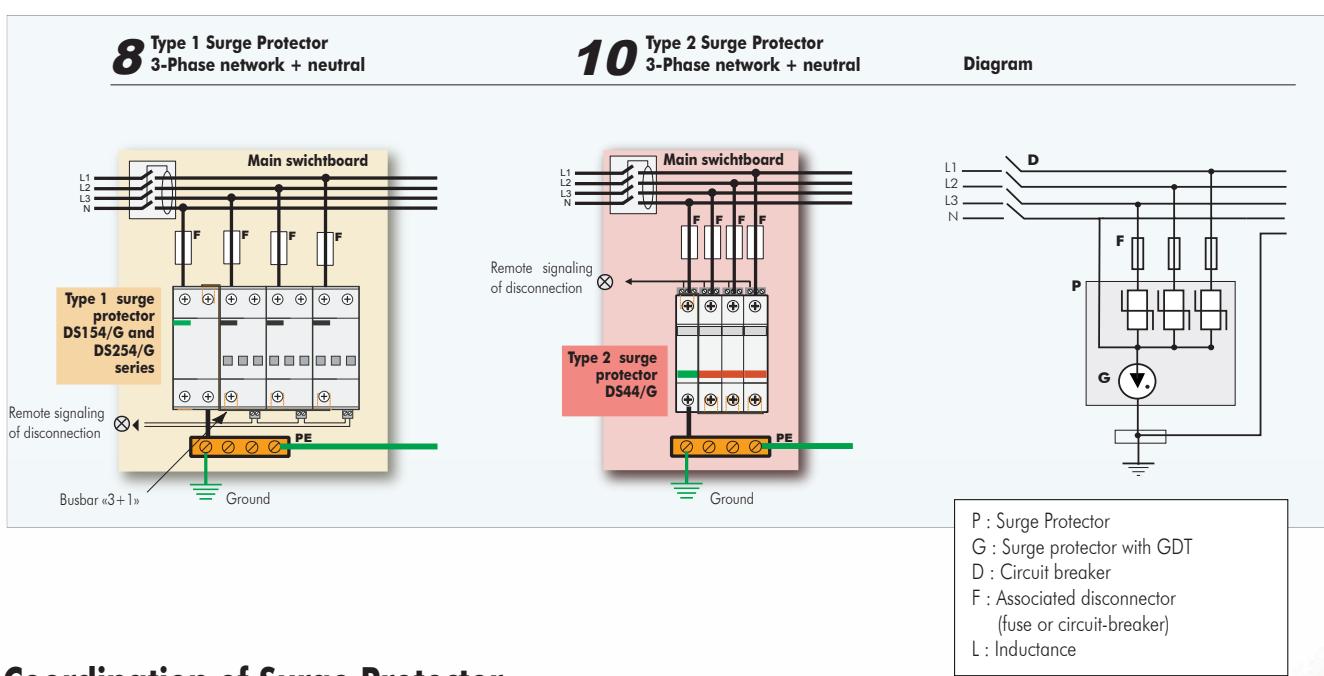
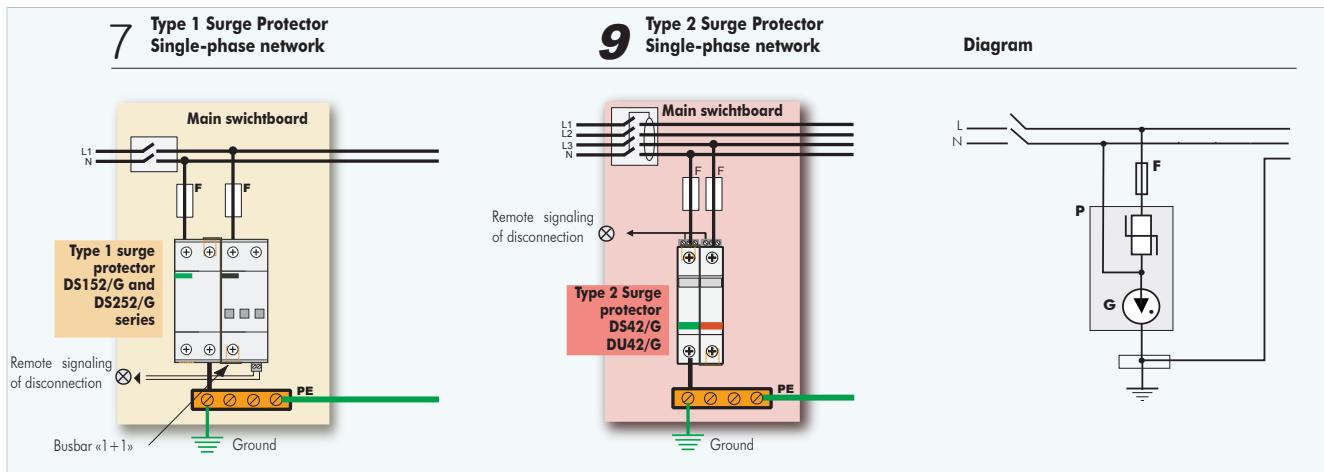
P : Surge protector  
D : Circuit breaker  
F : Associated disconnector (fuse or circuit-breaker)



# DS surge protectors wiring

## Common and Differential mode protection (CT2 connection)

Common mode (L/PE) and differential mode (L/N) protection provided by DS surge protectors in relation to the different types of AC network. These configurations CT2 (following IEC 60364) are also called «3+1» mounting.



## Coordination of Surge Protector

Example of coordination on 3-Phase network.

