

TSRL behaviour to EN 61000-4-11.doc, Switch-off and switch-on behaviour of Standart TSRL and TSRL 92109X19 with HWA + fast and soft Switch on after dip. Options: 150 - 230V for TSRL 92109X19, Line voltage: 230V

TSRL type	Switch-off voltage level, slow falling.	Power on after long pause	IEC61000-4-11			
			70% Uline 0.5s, (161 V)	40% Uline 0.1s	5% Uline 5s	5% Uline 10ms
Standart-type without HWA	110V	softstart	no switch-off	switch-off + softstart	switch-off + softstart	no switch-off+ Inrush
with HWA + slow switch-on after dip	190V	softstart	switch-off + softstart	switch-off + softstart	switch-off + softstart	switch-off + softstart
with HWA + fast switch-on after dip	150V	softstart	no switch-off, depending of fall time. Switch off if fast and softstart.	switch-off + softstart	switch-off + softstart	switch-off + fast and soft switch-on (max 40ms after line presence)

Full on: 0.15 - 0.95 s after line presence, because softstart time differ depending of transformer type.

Switch-off and switch-on behaviour of Standart TSRL and TSRL 92109X25 with HWA + fast and soft Switch on after dip.

Options: 72 - 144V for TSRL 92109X25

Line voltage: 110V

TSRL type	Switch-off voltage level, slow falling.	Power on after long pause	IEC61000-4-11			
			70% Uline 0.5s, (77 V)	40% Uline 0.1s	5% Uline 5s	5% Uline 10ms
Standart-type without HWA	55V	softstart	no switch-off	switch-off + softstart	switch-off + softstart	no switch-off+ Inrush
with HWA + slow switch-on after dip	90V	softstart	switch-off + softstart	switch-off + softstart	switch-off + softstart	switch-off + softstart
with HWA + fast switch-on after dip	72V	softstart	no switch-off, depending of fall time. Switch off if fast and softstart.	switch-off + softstart	switch-off + softstart	switch-off + fast and soft switch-on (max 40ms after line presence)

Full on: 0.15 - 0.95 s after line presence, because softstart time differ depending of transformer type.

Switch-off and switch-on behaviour of TSRL 92109X26 or TSRL 92109X28 with HWA + fast and soft Switch on after dip.
Options: TSRL 92109X28:verlängertes Andimmen + Pot. 10 30 ,Pot laced, remarked on label. TSRL 92109X28 is for addit. Capac. Loads.
Line voltage: 230V, range for TSRL =80V – 260V

TSRL type	Switch-off voltage level, slow falling.	Power on after long pause	IEC61000-4-11			
			70% Uline 0.5s, (161 V)	40% Uline 0.1s	5% Uline 5s	5% Uline 10ms
with HWA + fast switch-on after dip	79V	softstart	no switch-off, depending of fall time. Switch off if fast and softstart.	switch-off + softstart	switch-off + softstart	switch-off + fast and soft switch-on (max 40ms after line presence)

Full on: 0.15 - 0.95 s after line presence, because softstart time differ depending of transformer type.

Switch-off and switch-on behaviour of TSRL 92109X26 or TSRL 92109X28 with HWA + fast and soft Switch on after dip.
Options: TSRL 92109X28: verlängertes Andimmen + Pot. 10 30 ,Pot laced, remarked on label. TSRL 92109X28 is for addit. Capac. Loads.
Line voltage: 110V, range for TSRL =80V – 260V

TSRL type	Switch-off voltage level, slow falling.	Power on after long pause	IEC61000-4-11			
			70% Uline 0.5s, (77 V)	40% Uline 0.1s	5% Uline 5s	5% Uline 10ms
with HWA + fast switch-on after dip	79V	softstart	switch-off + softstart	switch-off + softstart	switch-off + softstart	switch-off + fast and soft switch-on (max 40ms after line presence)

Full on: 0.15 - 0.95 s after line presence, because softstart time differ depending of transformer type.