



3RZHU FRQWDFWRU \$& \$ N: 9 12  
VFUHZ WHUPLQDO

product brand name	6, 5, 86
product designation	3RZHU FRQWDFWRU
product type designation	57
<b>General technical data</b>	
size of contactor	6
product extension	
" IXQFWLRQ PRGXOH IRU FRPPXQ	1 R
" DX[LOLDU\ VZLWFK	<HV
power loss [W] for rated value of the current	
" DW \$& LQ KRW RSHUDWLQJ VWD	:
" DW \$& LQ KRW RSHUDWLQJ VWD	:
" ZLWKRXW ORDG FXUUHQW VKDU	:
insulation voltage	
" RI PDLQ FLUFXLW ZLWK GHJUHH	9
" RI DX[LOLDU\ FLUFXLW ZLWK GH	9
" YDOXH	
surge voltage resistance	
" RI PDLQ FLUFXLW UDWHG YDOXH	N9
" RI DX[LOLDU\ FLUFXLW UDWHG	N9
" YDOXH	
" PD[LXPX SHUPLVVLEOH YROWDJH IR	9
" FRLO DQG PDLQ FRQWDFWV DFFRUG	
shock resistance at rectangular impulse	
" DW ' &	J PV J PV
shock resistance with sine pulse	
" DW ' &	J PV J PV
mechanical service life (switching cycles)	
" RI FRQWDFWRU W\SLFDO	
" RI WKH FRQWDFWRU ZLWK DGGH	
" DX[LOLDU\ VZLWFK EORFN W\SLF	
" RI WKH FRQWDFWRU ZLWK DGGH	
" W\SLFDO	
reference code according to IEC 81346-2	4
Substance Prohibition (Date)	
<b>Ambient conditions</b>	
LQVWDOODWLRQ DOWLWXGH DW KHI	P
ambient temperature	
" GXULQJ RSHUDWLRQ	f &
" GXULQJ VWRUDJH	f &
relative humidity minimum	
relative humidity at 55 °C according to IEC 60068-2-30 maximum	

Main circuit	
number of poles for main current circuit	
number of NO contacts for main contacts	
operating voltage	
" DW \$& UDWHG YDOXH PD[LPXP	9
" DW \$& H UDWHG YDOXH PD[LPX	9
operational current	
" DW \$& DW 9 DW DPELHQW V UDWHG YDOXH	\$
" DW \$&	
2 XS WR 9 DW DPELHQW WHF UDWHG YDOXH	\$
2 XS WR 9 DW DPELHQW WHF UDWHG YDOXH	\$
" DW \$&	
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
" DW \$& H	
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
" DW \$& DW 9 UDWHG YDOXH	\$
" DW \$& D XS WR 9 UDWHG YD	\$
" DW \$& E XS WR 9 UDWHG YD	\$
" DW \$& D	
2 XS WR 9 IRU FXUUHQW SHI YDOXH	\$
2 XS WR 9 IRU FXUUHQW SHI YDOXH	\$
2 XS WR 9 IRU FXUUHQW SHI YDOXH	\$
2 XS WR 9 IRU FXUUHQW SHI YDOXH	\$
" DW \$& D	
2 XS WR 9 IRU FXUUHQW SHI YDOXH	\$
2 XS WR 9 IRU FXUUHQW SHI YDOXH	\$
2 XS WR 9 IRU FXUUHQW SHI YDOXH	\$
2 XS WR 9 IRU FXUUHQW SHI YDOXH	\$
PLQLPXP FURVV VHFWRQ LQ PDLQ UDWHG YDOXH	PPð
operational current for approx. 200000 operating cycles at AC-4	
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
operational current	
• at 1 current path at DC-1	
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
• with 2 current paths in series at DC-1	
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
• with 3 current paths in series at DC-1	

2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
<b>• at 1 current path at DC-3 at DC-5</b>	
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
<b>• with 2 current paths in series at DC-3 at DC-5</b>	
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
<b>• with 3 current paths in series at DC-3 at DC-5</b>	
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
2 DW 9 UDWHG YDOXH	\$
<b>operating power</b>	
" DW \$ & DW 9 UDWHG YDOXH	N:
" DW \$ &	
2 DW 9 UDWHG YDOXH	N:
2 DW 9 UDWHG YDOXH	N:
2 DW 9 UDWHG YDOXH	N:
2 DW 9 UDWHG YDOXH	N:
" DW \$ & H	
2 DW 9 UDWHG YDOXH	N:
2 DW 9 UDWHG YDOXH	N:
2 DW 9 UDWHG YDOXH	N:
2 DW 9 UDWHG YDOXH	N:
<b>operating power for approx. 200000 operating cycles at AC-4</b>	
" DW 9 UDWHG YDOXH	N:
" DW 9 UDWHG YDOXH	N:
<b>operating apparent power at AC-6a</b>	
" XS WR 9 IRU FXUUHQW SHDN	N9\$
" XS WR 9 IRU FXUUHQW SHDN	N9\$
" XS WR 9 IRU FXUUHQW SHDN	N9\$
" XS WR 9 IRU FXUUHQW SHDN	N9\$
<b>operating apparent power at AC-6a</b>	
" XS WR 9 IRU FXUUHQW SHDN	N9\$
" XS WR 9 IRU FXUUHQW SHDN	N9\$
" XS WR 9 IRU FXUUHQW SHDN	N9\$
" XS WR 9 IRU FXUUHQW SHDN	N9\$
<b>short-time withstand current in cold operating state up to 40 °C</b>	
" OLPLWHG WR V VZLWFKLQJ DW	\$ 8VH PLQLPXP FURVV VHFWRQ DFF WI
" OLPLWHG WR V VZLWFKLQJ DW	\$ 8VH PLQLPXP FURVV VHFWRQ DFF WR
" OLPLWHG WR V VZLWFKLQJ DW	\$ 8VH PLQLPXP FURVV VHFWRQ DFF WR
" OLPLWHG WR V VZLWFKLQJ DW	\$ 8VH PLQLPXP FURVV VHFWRQ DFF WR
" OLPLWHG WR V VZLWFKLQJ DW	\$ 8VH PLQLPXP FURVV VHFWRQ DFF WR
<b>no-load switching frequency</b>	
" DW ' &	K
<b>operating frequency</b>	
" DW \$ & PD[LPXP	K
" DW \$ & PD[LPXP	K
" DW \$ & PD[LPXP	K
" DW \$ & H PD[LPXP	K
" DW \$ & PD[LPXP	K
<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	' &

<b>control supply voltage at DC</b>	
" UDWHG YDOXH	9
<b>operating range factor control supply voltage rated value of magnet coil at DC</b>	
" LQLWLDO YDOXH	
" IXOO VFDOH YDOXH	
<b>closing power of magnet coil at DC</b>	:
<b>holding power of magnet coil at DC</b>	:
<b>closing delay</b>	
" DW ' &	PV
<b>opening delay</b>	
" DW ' &	PV
<b>arcing time</b>	PV
<b>control version of the switch operating mechanism</b>	6WDQGDUG \$ \$
<b>Auxiliary circuit</b>	
QXPEHU RI 12 FRQWDFWV IRU DX[LC	
LQVWDQWDQHRXV FRQWDFW	
RSHUDWLRQDO FXUUHQW DW \$ & F	\$
<b>operational current at AC-15</b>	
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
<b>operational current at DC-12</b>	
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
<b>operational current at DC-13</b>	
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
<b>contact reliability of auxiliary contacts</b>	IDXOW\ VZLWFKLQJ SHU PLOOLRQ 9
<b>UL/CSA ratings</b>	
<b>full-load current (FLA) for 3-phase AC motor</b>	
" DW 9 UDWHG YDOXH	\$
" DW 9 UDWHG YDOXH	\$
<b>yielded mechanical performance [hp]</b>	
" IRU VLQJOH SKDVH \$ & PRWRU	
2 DW 9 UDWHG YDOXH	KS
2 DW 9 UDWHG YDOXH	KS
" IRU SKDVH \$ & PRWRU	
2 DW 9 UDWHG YDOXH	KS
2 DW 9 UDWHG YDOXH	KS
2 DW 9 UDWHG YDOXH	KS
2 DW 9 UDWHG YDOXH	KS
<b>contact rating of auxiliary contacts according to UL</b>	\$ 4
<b>Short-circuit protection</b>	
<b>design of the fuse link</b>	
" IRU VKRUW FLUFXLW SURWHFWL	
2 ZLWK W\SH RI FRRUGLQDWLR	J* \$ 9 N\$ D0 \$ 9 N\$ %6
2 ZLWK W\SH RI DVVLJQPHQW	J* \$ 9 N\$ D0 \$ 9 N\$ %6
	N\$

" IRU VKRUW FLUFXLW SURWHFWL UHTXLUHG	J* \$ 9 N\$
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	f URWDWLRQ SRVVLEOH RQ YHUWLFDO IRUZDUG DQG EDFNZDUG E\ f RQ YHU
<b>fastening method</b>	VFUHZ DQG VQDS RQ PRXQWLQJ RQWR PP DFFRUGLQJ WR ',1 (1
" VLGH E\ VLGH PRXQWLQJ	<HV
<b>height</b>	PP
<b>width</b>	PP
<b>depth</b>	PP
<b>required spacing</b>	
" ZLWK VLGH E\ VLGH PRXQWLQJ	
<sup>2</sup> IRUZDUGV	PP
<sup>2</sup> XSZDUGV	PP
<sup>2</sup> GRZQZDUGV	PP
<sup>2</sup> DW WKH VLGH	PP
" IRU JURXQGHG SDUWV	
<sup>2</sup> IRUZDUGV	PP
<sup>2</sup> XSZDUGV	PP
<sup>2</sup> DW WKH VLGH	PP
<sup>2</sup> GRZQZDUGV	PP
" IRU OLYH SDUWV	
<sup>2</sup> IRUZDUGV	PP
<sup>2</sup> XSZDUGV	PP
<sup>2</sup> GRZQZDUGV	PP
<sup>2</sup> DW WKH VLGH	PP
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b>	
" IRU PDLQ FXUUHQW FLUFXLW	VFUHZ W\SH WHUPLQDOV
" IRU DX[LOLDU\ DQG FRQWURO F	VFUHZ W\SH WHUPLQDOV
" DW FRQWDFWRU IRU DX[LOLDU\	6FUHZ W\SH WHUPLQDOV
" RI PDJQHW FRLO	6FUHZ W\SH WHUPLQDOV
<b>type of connectable conductor cross-sections</b>	
" IRU PDLQ FRQWDFWV	
<sup>2</sup> VROLG	[ PPø [ PPø [ PPø
<sup>2</sup> VROLG RU VWUDQGHG	[ PPø [ PPø [ PPø
<sup>2</sup> ILQHO\ VWUDQGHG ZLWK FRU	[ PPø [ PPø
" DW \$:* FDEOHV IRU PDLQ FRQW	[ [ ]
<b>connectable conductor cross-section for main contacts</b>	
" VROLG	PPø
" VWUDQGHG	PPø
" ILQHO\ VWUDQGHG ZLWK FRU	PPø
<b>connectable conductor cross-section for auxiliary contacts</b>	
" VROLG RU VWUDQGHG	PPø
" ILQHO\ VWUDQGHG ZLWK FRU	PPø
<b>type of connectable conductor cross-sections</b>	
" IRU DX[LOLDU\ FRQWDFWV	
<sup>2</sup> VROLG RU VWUDQGHG	[ PPø [ PPø [ PPø
<sup>2</sup> ILQHO\ VWUDQGHG ZLWK FRU	[ PPø [ PPø
" DW \$:* FDEOHV IRU DX[LOLDU\ F	[ [ ]
<b>AWG number as coded connectable conductor cross section</b>	
" IRU PDLQ FRQWDFWV	
" IRU DX[LOLDU\ FRQWDFWV	
<b>Safety related data</b>	
<b>product function</b>	
" PLUURU FRQWDFW DFFRUGLQJ V	<HV ZLWK 5+
% YDOXH ZLWK KLJK GHPDQG UDW	

proportion of dangerous failures	
" ZLWK ORZ GHPDQG UDWH DFFRL	
" ZLWK KLJK GHPDQG UDWH DFFR	
IDLOXUH UDWH >),7@ ZLWK ORZ GH	),7
7 YDOXH IRU SURRI WHVW LQWHUY	\
, (&	
protection class IP on the front according to IEC 60529	,3
touch protection on the front according to IEC 60529	ILQJHU VDIH IRU YHUWLFDO FRQWDFW IURF
suitability for use	
" VDIHW\ UHODWHG VZLWFKLQJ 2	<HV

**Certificates/ approvals**

**General Product Approval**



[&RQILUPDWLR](#)



[\\_&](#)



EMC	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
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[Z\SH \(IDPLQDWL &HUWLI LFDWF](#)



EG-Konf.



[6SHFLDO 7HVWZ &SHUWHVWF &HUWLI LFDWF](#)

[DWHV 7HVW 5HSRU](#)

**Marine / Shipping**



Marine / Shipping	other	Dangerous Good
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[&RQILUPDWLR](#)



VDE

[ZUDQVSRUW ,QIRUP DWLRQ](#)

**Further information**

Information- and Downloadcenter (Catalogs, Brochures,...)

[KWWSV\\_ZZZ\\_VLHPHQV\\_FRP\\_LF](#)

Industry Mall (Online ordering system)

[KWWSV\\_PDOO\\_LQG\\_XVWU\\_VLHPHQV\\_FRP\\_PDOO\\_HQ\\_HQ &DWDORJ\\_SURGXFW"POIE\\_57\\_%](#)

Cax online generator

[KWWS\\_VXSSRUW\\_DXWRPDWLRQ\\_VLHPHQV\\_FRP\\_::&\\$:RUGHU\\_GHIDXOW\\_DVS\["ODQJ\\_HQ\\_POI](#)

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

[KWWSV\\_VXSSRUW\\_LQG\\_XVWU\\_VLHPHQV\\_FRP\\_FV\\_ZZ\\_HQ\\_SV\\_57\\_%\\*](#)

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

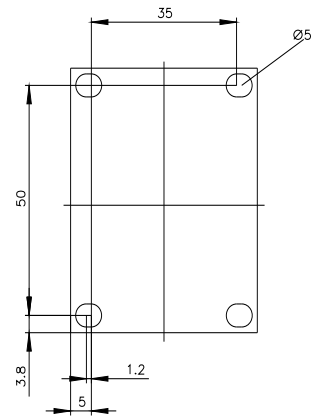
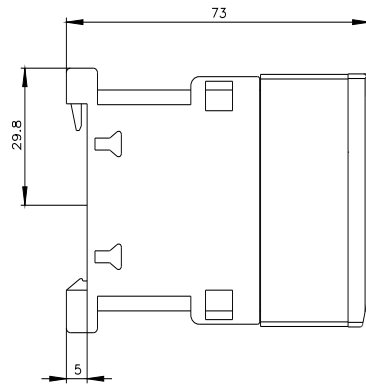
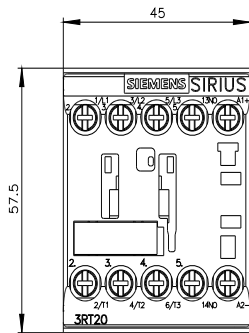
[KWWS\\_ZZZ\\_DXWRPDWLRQ\\_VLHPHQV\\_FRP\\_ELOGGE\\_FD\[BGH\\_DVS\["POIE\\_57\\_%\\* ODQJ\\_HQ\\_POI](#)

Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

[KWWSV\\_VXSSRUW\\_LQG\\_XVWU\\_VLHPHQV\\_FRP\\_FV\\_ZZ\\_HQ\\_SV\\_57\\_%\\* FKDU](#)

Further characteristics (e.g. electrical endurance, switching frequency)

[KWWS\\_ZZZ\\_DXWRPDWLRQ\\_VLHPHQV\\_FRP\\_ELOGGE\\_LQGH\[DVS\["YLHZ\\_6HDUEK\\_POIE\\_57](#)



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