



???SIEMENS????????????????????????????????100??  
??  
????????????IP55????????????????  
??  
——????????4\*90??  
??IP55????????  
??——????  
??  
??  
??  
????????????——??  
——??Esso Unirex  
N3??20????CPU: 7????CPU(CPU  
312,CPU 314,CPU 315-2 DP,CPU 315-2 PN/DP,CPU 317-2 DP,CPU 317-2  
PN/DP,CPU 319-3 PN/DP) 6 ???? CPU???????????? I/O??CPU 312C?CPU  
313C?CPU 313C-2 PtP?CPU 313C-2 DP?CPU 314C-2 PtP?CPU 314C-2  
DP? 5 ???? CPU?CPU 315F-2 DP?CPU 315F-2 PN/DP?CPU 317F-2  
DP?CPU 317F-2 PN/DP?CPU 319F-3 PN/DP? 2????CPU(CPU 315T-2 DP,  
CPU 317T-2 DP) 18?CPU??-25°C ? +60°C????????????  
???????????????????????????????? SIMATIC S7-300 ?????????? CPU????? CPU  
????????? CPU? ????????????? CPU ?????? CPU? CPU 312????????? CPU  
314?? CPU 315-2 DP????????/????????????????PROFIBUS  
DP???????????? CPU 315-2 PN/DP????????/????????????????PROFIBUS  
DP?PROFINET IO????????????????PROFINet???????????????????????????????? CPU  
317-2 DP????????????????????????PROFIBUS DP???????????????? CPU 317-2  
PN/DP????????????????????????PROFIBUS DP?PROFINET  
IO????????????????????PROFINet???????????????????????????????? CPU 319-3  
PN/DP????????????????????????????????????PROFIBUS DP?PROFINET  
IO????????????????????PROFINet???????????????????????????????? CPU 312C???????????? I/O  
???????????????????? CPU CPU 313C???????????????? I/O ???? CPU CPU 313C-2  
PtP???????????? I/O ?2???????????????????????? CPU CPU 313C-2 DP???????????? I/O  
?PROFIBUS DP ????????????????????? CPU CPU 314C-2 PtP???????????????? I/O  
?2???????????????????????? CPU CPU 314C-2 DP???????????????? I/O?PROFIBUS DP  
???????????????????? CPU CPU 315F-2 DP????? PROFIBUS DP  
????????????????????/???????????????? CPU 315F-2  
PN/DP????????/????????????????????PROFIBUS DP?PROFINET  
IO????????????????????PROFINet???????????????????????????????? CPU 317F-2  
DP????????????????????????PROFIBUS DP???????????????????? CPU 317F-2  
PN/DP????????????????????????PROFIBUS DP?PROFINET  
IO????????????????????PROFINet???????????????????????????????? CPU 319F-3

PN/DP????????????????PROFIBUS DP?PROFINET  
IO????????????????????PROFInet???????????????????????????????? 6ES7  
151-1AA05-0AA1 ??????? IM151-1?90????????????????????6ES71511AA050A  
B0\*1+6ES79720BA120XA0\*1? 6ES7 151-1AA05-0AA4 ??????? IM151-1?35  
????????????????????6ES71511AA050AB0\*1+6ES79720BA410XA0\*1? 6ES7  
151-1AA05-0AA5 ??????? IM151-1????????????????????6ES71511AA050  
AB0\*1+6ES79720BA520XA0\*1? 6ES7 151-1AA05-0AB4 ??????? IM151-1?3  
5????????????????????6ES71511AA050AB0\*1+6ES79720BB410XA0\*1? 6ES7  
151-1AA05-0AB5 ??????? IM151-1????????????????????6ES71511AA050A  
B0\*1+6ES79720BB520XA0\*1? 6ES7 151-1AB02-0AB0 ET 200S IM 151  
?????? 6ES7 151-1BA02-0AB0 ????????? IM151-1 6ES7 151-1CA00-0AB0  
???????? IM151-1 6ES7 151-7AB00-0AB0 ET 200S IM 151 ?CPU ??????  
6ES7 138-4HA00-0AB0 DP-?????for CPU only) ??????? 6ES7  
131-4BB01-0AA0 2?????? 24VDC ?? ?5?? 6ES7 131-4BB01-0AB0 2??????  
24VDC ??? ?5?? 6ES7 131-4BD01-0AA0 4?????? 24VDC ?? ?5?? 6ES7  
131-4BD01-0AB0 4?????? 24VDC ??? ?5?? 6ES7 131-4BD51-0AA0  
4?????? 24VDC ?? ?5?? 6ES7 131-4CD00-0AB0 4?????? UC 24V...48V ?  
LED SF (???)????5? 6ES7 131-4EB00-0AB0 2?????? 120VAC ?5?? 6ES7  
131-4FB00-0AB0 2?????? 230VAC ?5?? 6ES7 131-4RD00-0AB0 4??????  
DC 24V NAMUR 15 MM ???LED SF ?????5? ??????? 6ES7 132-4BB01-0AA0  
2?????? 24VDC 0,5A ?? ?5?? 6ES7 132-4BB01-0AB0 2?????? 24VDC 0,5A  
??? ?5?? 6ES7 132-4BD02-0AA0 4?????? 24VDC 0,5A ?? ?5?? 6ES7  
132-4BB31-0AA0 2?????? ??? ??24V/2A????5? 6ES7 132-4BB31-0AB0  
2?????????????? ??24V/2A????5? 6ES7 132-4BD32-0AA0 4?????? 24VDC 2A  
?? ?5?? 6ES7 132-4FB01-0AB0 2?????? ??120/230V????5? 6ES7  
132-4HB01-0AB0 2?????? 24VDC/230VAC 5A ?5?? 6ES7 132-4HB10-0AB0  
2?????? ?????24V-48V/5A???24V-230V/5A?5?? ??????? 6ES7  
134-4FB01-0AB0 2?????? ????? ?? 6ES7 134-4FB52-0AB0 2?????????? ??  
+/-10V???????? 1MS 6ES7 134-4LB02-0AB0 2?????? ????? ??? (16?) 6ES7  
134-4GB01-0AB0 2?????? ????? ?? 2?? 6ES7 134-4GB52-0AB0 2??????????  
I-2? 4 - 20MA???????? 1MS? 6ES7 134-4GB11-0AB0 2?????? ????? ?? 4??  
6ES7 134-4GB62-0AB0 2?????????? I-4? 4 - 20MA???????? 1MS 6ES7  
134-4MB02-0AB0 2?????? ????? ??? (16?) 2?? 6ES7 134-4JB51-0AB0  
2?????? RTD????? 6ES7 134-4JB01-0AB0 2?????? ?????? 6ES7  
134-4NB01-0AB0 2????????????? ?????????????? 6ES7 134-4NB51-0AB0  
2????????????? RTD?????? ??????????? ????????? 6ES7 135-4FB01-0AB0  
2?????? ????? ?? 6ES7 135-4GB01-0AB0 2?????? ????? ?? 6ES7  
135-4LB02-0AB0 2?????? ????? ??? (16?) 6ES7 135-4MB02-0AB0 2???????

???? ??? (16?) ???? 6ES7 138-4DA04-0AB0 1????24V/100KHZ 6ES7  
138-4DB03-0AB0 SSI ?????? 6ES7 138-4DD00-0AB0 2 Pulse (pulse width  
modulation, timer) 6ES7 138-4DC00-0AB0 STEP1 ?????? 6ES7  
138-4DF01-0AB0 1 SI ???? (RS232 RS422 RS485 ???? ) 6ES7  
138-4DF11-0AB0 1? SI ??????????RS232/422?485 MODBUS/USS 6ES7  
138-4DL00-0AB0 1 -U ?? ?????? ?? 5V/24V ?????? 6ES7 138-4GA00-0AB0 4  
?IQ-SENSE ??24VC????5? ????? 6ES7 193-4CC20-0AA0 TM-P15S23-A1 f.  
PM//2x3 ?????????? 6ES7 193-4CC30-0AA0 TM-P15C23-A1 f. PM/2x3  
???????????? 6ES7 193-4CD20-0AA0 TM-P15S23-A0 f. PM/2x3 ??????????  
6ES7 193-4CD30-0AA0 TM-P15C23-A0 f. PM/2x3 ????????????? 6ES7  
193-4CE00-0AA0 TM-P15S22-01 f. PM/2x2 ???? ?????? 6ES7  
193-4CE10-0AA0 TM-P15C22-01 f. PM/2x2 ????????????? 6ES7  
193-4CA20-0AA0 TM-E15S24-A1 f. EM/2x4 ????????????? ?5?? 6ES7  
193-4CA30-0AA0 TM-E15C24-A1 f. EM/2x4 ????????????? ?5?? 6ES7  
193-4CB20-0AA0 TM-E15S24-01 f. EM/2x4 ????????????? ?5?? 6ES7  
193-4CB30-0AA0 TM-E15C24-01 f. EM/2x4 ????????????? ?5?? 6ES7  
193-4CB00-0AA0 TM-E15S23-01 f. EM/2x3 ????????????? ?5?? 6ES7  
193-4CB10-0AA0 TM-E15C23-01 f. EM/2x3 ????????????? ?5?? 6ES7  
193-4CA40-0AA0 TM-E15S26-A1 für EM/2x6 ????????????? ?5?? 6ES7  
193-4CA50-0AA0 TM-E15C26-A1 für EM/2x6 ????????????? ?5?? 6ES7  
193-4JA00-0AA0 SIMATIC DP?ET 200S???????? ?? 6ES7 193-4GA00-0AA0  
????TM-P?TM-E????? 3 x 10 MM,??5? 6ES7 193-4GB00-0AA0  
????????????????????????????????5? ET200M: 6ES7 153-1AA03-0XA1 IM153-1??????90  
????????????????????????6ES71531AA030XB0\*1+6ES79720BA120XA0\*1? 6ES7  
153-1AA03-0XA4 IM153-1??????35????????????????????6ES71531AA030XB0\*1  
+6ES79720BA410XA0\*1? 6ES7 153-1AA03-0XA5  
IM153-1????????????????????????????????  
?6ES71531AA030XB0\*1+6ES79720BA520XA0\*1? 6ES7 153-1AA03-0XB4 I  
M153-1??????35????????????????????6ES71531AA030XB0\*1+6ES79720BB410X  
A0\*1? 6ES7 153-1AA03-0XB5 IM153-1????????????????????????????  
?6ES71531AA030XB0\*1+6ES79720BB520XA0\*1? S7-300?????PLC?????????  
CPU????????????IO????????????????????????S7-300????????CPU????????????IO?????  
????????? ???PLC??S7-300??? 20?????CPU: 7?????CPU(CPU 312,CPU  
314,CPU 315-2 DP,CPU 315-2 PN/DP,CPU 317-2 DP,CPU 317-2  
PN/DP,CPU 319-3 PN/DP) 6 ???? CPU???????????? I/O??CPU 312C?CPU  
313C?CPU 313C-2 PtP?CPU 313C-2 DP?CPU 314C-2 PtP?CPU 314C-2  
DP? 5 ??????? CPU?CPU 315F-2 DP?CPU 315F-2 PN/DP?CPU 317F-2  
DP?CPU 317F-2 PN/DP?CPU 319F-3 PN/DP? 2?????CPU(CPU 315T-2 DP,

CPU 317T-2 DP) ???PLC S7-400????????? PLC S7-400????????? ???PLC  
S7-300????????? S7-300 ??????PLC ?????????????????? ???PLC  
S7-200????????? S7-200??PLC????????????????????????????????? ???PLC  
S7-1200????????? SIMATIC S7-1200 CPUSIMATIC S7-1200 ??? CPU  
?????????CPU 1211C?CPU 1212C ? CPU1214C S7-400  
PLC????????????????????? S7-400 PLC?????????????????????????????????????  
???CPU???  
????????????????? 4? ??????  
???“SIMATIC NET”?????  
??? 5?  
?????HMI??? HMI?????PLC?????????????????????????????????????TD200?????????  
OP3?OP7?OP17?????/??????OP27?OP37?????????????TP7?TP27/37?TP170A/  
B??SIMATIC???PC670?????????PC???????HMI?????HMI???????????ProTool  
?????????PLC??? SIMATIC S7????? ?????????? ?1?????????  
?????????????????PLC?PC?????????????????????????????????STEP 7?????SIMATIC  
S7???S7-300/400?C7 PLC?SIMATIC  
WinAC??PC?????????????????????????????STEP  
7-Micro/WIN??Windows?????????S7-200??PLC????????????? SIMATIC S7?????  
????????? ??PC?????  
??PC?????WinAC?????????????????????????PLC?????????????????Windows NT4.  
0?????SIMATIC?????????????WinAC?????PLC?????????PLC?????????????????  
?????????PLC?????????????PC?????????PLC?????????WinAC?SIMATIC  
S7?????????????????????SIMATIC?????????STEP  
7?????????????????WinAC?????????S7????????? SIMATIC S7????? ?????????? ??????  
?????????????????????????????HMI??SCADA?????????????????????????????????????  
roTool?????????????WinCC?  
ProTool?????????HMI?????????????????????PC?????????STEP 7??ProTool?????????Pr  
oTool/lite?????????????OP3?OP7?OP17?TD17??ProTool/Pro?????????PC?????  
?HMI???ProTool/Pro?????????????????????Windows??????  
WinCC?????????????????????SCADA?Supervisory Control and Data  
Acquisition?????????????PC?????WinCC?????????????????STEP 7?????????????PLC  
??  
??????WinCC5.0??????????IE?????????????  
???SIMATIC??PLC?????1958?????C3,S3,S5,S7?????????????????????????  
?????SIMATIC?PLC?6??????SIMATIC?PLC?6?  
1?????????????????1975?????????SIMATIC S3?????????????????????????  
2?1979??S3???SIMATIC S5????????????????????????? 3?20??80?????S5?????????—  
—U??PLC?????????S5-90U?95U?100U?115U?135U?155U? 4?1994?4??S7????

????????????????????WINDOWS????????S7-200?300?400?  
??SIMATIC??PLC????1958????C3,S3,S5,S7????? 5?19  
96????????PCS7?????WINCC??WINDOWS????  
????PROFIBUS????COROS????SINEC??????  
6????TIA?Totally Integrated  
Automation????PLC????S3?S5??PLC????  
????S7??PLC????TDC????SIMADYN  
D????S7????????? S7-2 0 0 S M  
A R T ????C P U ????C P U  
?????I / O ????C P U ????  
????? I/O ????  
???????? S7-200 S M A R T C P U ????1 ????1 ?RS485  
?????CM01 ????3 ????  
??CPU ????S7 ??TCP/IP ???? .  
????? . ?SMART LINE HMI ???? .  
????? . ???4 ???? S7-200 SMART CPU  
?????1 ?RS485 ????CM01  
????????RS232/RS485 ????4 ???? PLC????? 1.LOGO????  
????????????????  
“????”????????? ???? ???? PC ?????? 36 ?????????? 130 ?? LOGO!  
8: ?????? PC ?????? 38/43 ?????? 200/400 ? ??????????  
.S7-1200??PLC ?????? ??????????  
PROFINET IO ?????? SIMATIC ????HMI????????? CPU  
????????????? Web ?????? Web ??  
????????????????? ????/??  
???????? I/O ?????? SIMATIC  
???? 3.S7-1500??PLC ??????IP20 ??????  
????????? ??? Totally Integrated Automation Portal ???? STEP 7  
Professional V12 ?????? ??: ???? ????  
???????? PROFINET IO?2 ?????? CPU 1515-2 PN  
???????? PROFINET ??????  
S7-300 ?????PLC?????????  
?????????????  
???????? S7-300F ??????S7-300 ??????  
ET 200S ? ET 200M ??? I/O ? ???? PROFIsafe ??? PROFIBUS DP ??????  
???????? 5.S7-400/S7-400H/S7-400F/FH S7-400 ? SIMATIC  
???????? PLC???????? (TIA) ?????S7-400  
????????????????

