SIEMENS

G3368.1

de	Installations- und Inbetriebnahmeanleitung	Regler
en	Installation and Commissioning Guide	Controller
fr	Guide d`installation et de mise en service	Régulateur
it	Guida alla installazione e messa in servizio	Regolatore
es	Guía de Instalación y Puesta en Servicio	Controlador
pl	Instrukcja instalacji i uruchomienia	Regulator
ch	安装及操作手册	控制器

RWC32/82

en English

Application

The POLYGYR-Ace controller is used for the control of packaged air conditioning units or heating plant.
Two digital outputs selectable between 2 stages of on/off control or as a single 3 point controller.
A digital relay contact input is used to select either day/night or summer/winter switch-over as determined by the setting of the corresponding parameter.

The second analogue input can be used for the following applications:

- PI Limiter
- Remote Set point
- Temperature differential
- Temperature shift

The setting of the parameters are displayed on the LCD.
The RWC32/RWC82 controller is intended for either DIN rail mounting in a switchboard or screw mounting for external use.

Parameters (default values in brackets)

Name	Description	Display, Setting Range
Main	Main temperature	–35...+130 °C
Ts	Temperature setpoint	0...110 °C (20)
2nd	Second analogue input	–35...+130 °C
D I/P	Digital input Enable	On Off (Off)
SW / DN	SW changeover/ Day night select	DN On/ SW On (DN On)
TS-D	Day setpoint	0...110 °C (20)
TS-N	Night setpoint	0...110 °C (16)
TS-W	Winter setpoint	0...110 °C (20)
TS-S	Summer setpoint	0...110 °C (22)
LIMITER	PI limiter mode	
MX / MN	Max. / Min. limit select	Max.On/Min.On (Min.On)
TL	Limiting temperature	0...110 °C (16)
REMOTE	Remote setpoint mode	
Range	0...50 °C / 0...100 °C	50 / 100 (50)

Name	Description	Display, Setting Range
DIFF	Temperature difference mode	
TDIFF	Temperature difference	0...50 °C (0)
SHIFT	Temperature shift mode	
SF ST	Temperature shift start	–35...+35 °C (26)
SF ED	Temperature shift end	–35...+35 °C (30)
Shift	Temperature shift	0...35 °C (4)
O/P1	Output 1	Heat / Cool (Heat)
O/P2	Output 2	Heat / Cool / Off (Cool)
XDZ	Dead Zone	0...20 °C (2)
TN	Integral time ...(OFF)	16, 32, 64...4096s (128)
SD1	Switching differential for output 1	0.5...10 °C (1)
SD2	Switching differential for output 2	0.5...10 °C (1)
XP	Proportional band for 3 position	1...100 °C (20)
TCYC	Actuator cycle time for 3 position	30/90/120/150 (150)

Operating Modes

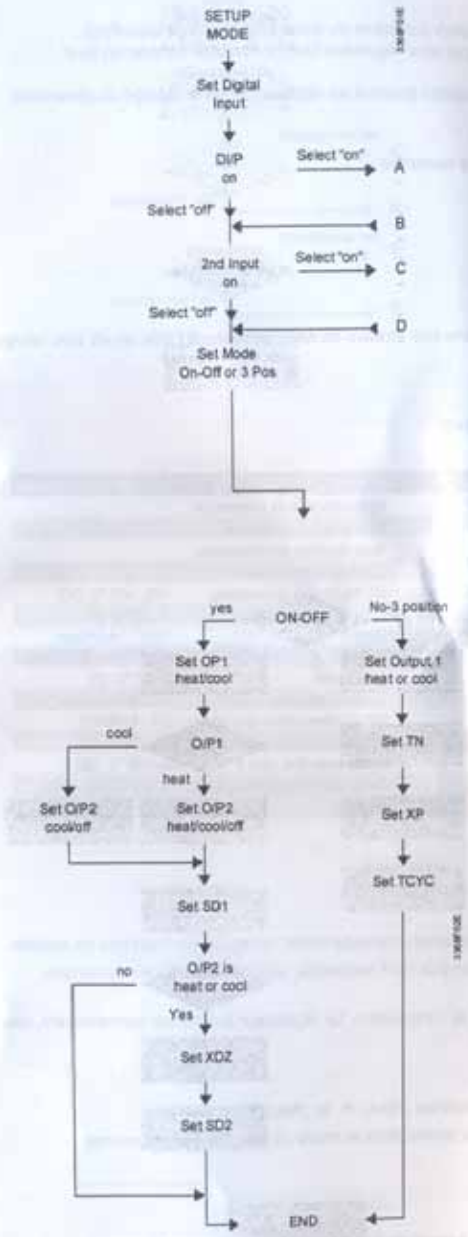
The POLYGYR-Ace has three different operating modes:

- **Setup mode:** Used to configure the controller to the application. In this mode the controller is not in operation.
  To get into setup mode: Press Select "●" for more than 5 seconds. See next pages for explanations of the setup process.
- **Test mode:** Used to test the functioning of the controller and the installation. The controller operates normally, but displays the following test values:
  Output 1< > Output 2< > Analog Input 1< >
  Analog Input 2 < > Digital Input.
  To get into test mode: Press Up "▲" and Down "▼" key simultaneously.
- **Normal mode:** As soon as the configuration has been finished, the controller goes into the normal operating mode.

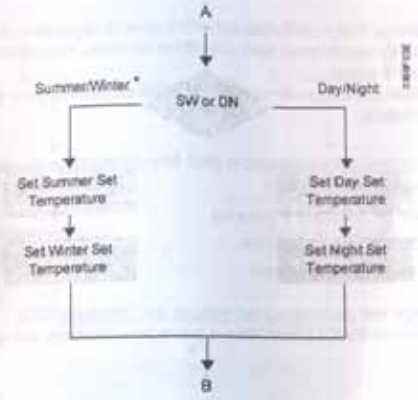
Time-out

From any of the described modes the controller times out back to the normal operating mode.
From setup-mode: after 30 seconds
From test-mode: after 5 minutes

en
Set Up Procedure

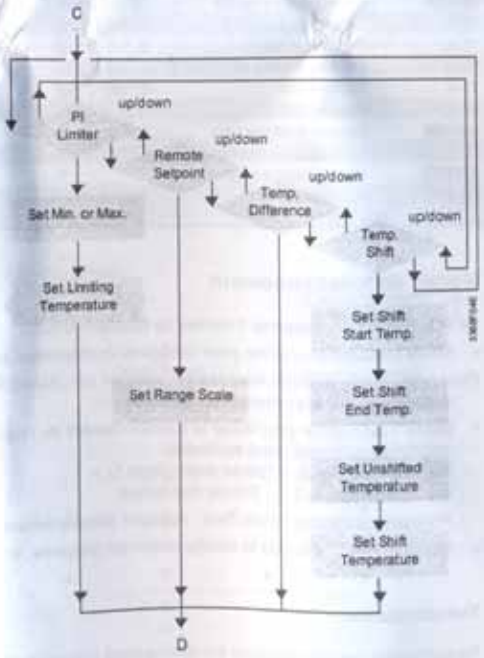


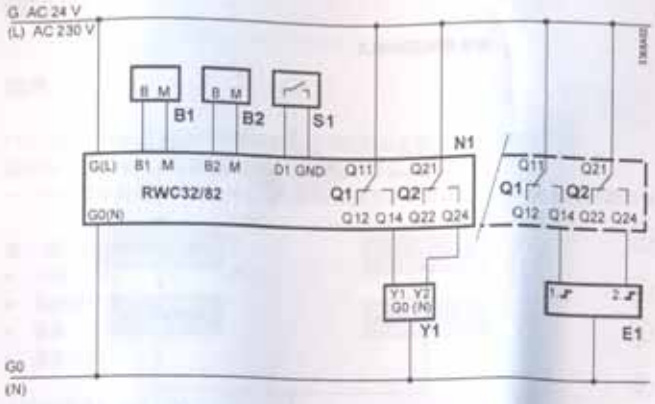
if digital input is used:



* if OUTPUT 2 = Off
OUTPUT 1 will be reversed (Summer/Winter changeover)

if second analog input is used:





ch 接线图符号

RWC32 — AC 230 V 电源
RWC82 — AC 24 V 电源

N1	RWC32/82 控制器
B1	主温度传感器
B2	辅助温度传感器或远程设定点
S1	时间开关或夏天 / 冬天切换
Q1/Q2	三位或二位无源继电器触点
Y1	三位控制驱动器 (AC 24... 230 V)
E1	二位控制电负载

注：继电器触点（无源）可接通输入与控制器的电源，只要该电压不超过 AC 230 V

de Anschlussschaltplan

Betriebsspannung: RWC32 – AC 230 V RWC82 – AC 24 V

N1	Regler RWC32/RWC82
B1	Haupttemperaturfühler
B2	Hilfstemperaturfühler oder Fernsollwert
S1	Zeitschalter oder Sommer-/ Winterthermostat
Q1/Q2	Relaiskontakte potentialfrei für 3-Punkt oder 2-Punkt-Ansteuerung
Y1	Stellantrieb mit 3-Punkt-Ansteuerung (AC 24... 230 V)
E1	Elektrische Last 2-Punkt-Ansteuerung (2 Stufen)

Hinweis: An die potentialfreien Relaiskontakte kann eine Alternativspannung von max. AC 230 V angeschlossen werden.

fr Schéma de raccordement

RWC32 – Alimentation 230 V~ RWC82 – Alimentation 24 V~

N1	Régulateurs RWC32/82
B1	Sonde de température principale
B2	Sonde de température auxiliaire ou consigne à distance
S1	Horloge ou thermostat été/hiver
Q1/Q2	Contacts de relais libres de potentiel pour régulation à 3 positions ou tout ou rien à 2 étages
Y1	Servomoteur avec régulation à 3 positions (24 .. 230 V~)
E1	Régulation tout ou rien de charge électrique

N.B. Les contacts de relais (libres de potentiel) peuvent être alimentés par une tension alternative pour l'alimentation du régulateur, à condition qu'elle ne dépasse pas 230 V~.

es Esquema de conexión

RWC32 – Alimentación 230 V CA RWC82 – Alimentación 24 V CA

N1	Controladores RWC32/82
B1	Sonda principal de temperatura
B2	Sonda de temperatura auxiliar o consigna remota
S1	Contador o termostato verano/invierno
Q1/Q2	Contactos relè libres de potencial para control a 2 ó 3-puntos en 2 etapas
Y1	Actuador control a 3-puntos (24...230 V CA)
E1	Carga eléctrica con control a 2-puntos

Nota: Los contactos de relè (libres de potencial) se suministran con tensión alternativa a la alimentación del controlador, en tanto no se sobrepasen los 230 V CA.

en Connection diagram

RWC32 – AC 230 V supply RWC82 – AC 24 V supply

N1	RWC32/82 controllers
B1	Main temperature sensor
B2	Auxiliary temperature sensor or remote setpoint
S1	Timer or summer/winter thermostat
Q1/Q2	Potential-free relay contacts for 3-position or 2-position control in 2 steps
Y1	Actuator with 3-position control (AC 24...230 V)
E1	Electrical load 2-position control

Note: Relay contacts (potential free) can be supplied with an alternative voltage to the supply of the controller, as long as it does not exceed AC 230 V.

it Schema di collegamento

RWC32 – 230 V AC RWC82 – 24 V AC y

N1	Regolatori RWC32/82
B1	Sonda temperatura principale
B2	Sonda temperatura ausiliaria o potenziometro esterno
S1	Contatto orologio o contatto (es. termostato) estate/inverno
Q1/Q2	Contatti relè puliti per 3 punti o inseritore 2 gradini a 2 punti
Y1	Servocomando per controllo On/Off (24...230 V AC)
E1	Carico elettrico per controllo 2 punti (o a 3 punti modulante)

Nota: i contatti relè (a potenziale libero) possono essere impiegati con una tensione diversa da quella del regolatore purché non ecceda i 230 V AC.

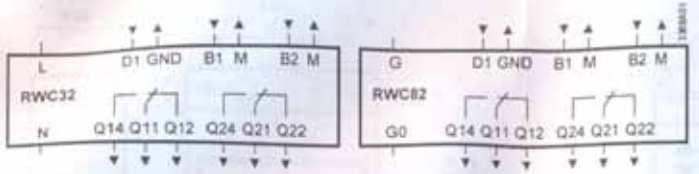
pl Schemat po³¹czen

RWC32 – zasilanie 230 V AC RWC82 – zasilanie 24 V AC

N1	Regulatory RWC32/82
B1	Czujnik g³ownej temperatury
B2	Czujnik pomocniczej temperatury lub zdalna wartoœæ zadana
S1	Zegar lub termostat lato/zima
Q1/Q2	Beznapie ciowe styki przeka nika do regulacji 3-po³o¿eniowej lub 2-stopniowej regulacji 2-po³o¿eniowej
Y1	Si³ownik ze sterowaniem 3-po³o¿eniowym (24..230 V AC)
E1	Obci¹¿enie elektryczne regulacji 2-po³o¿eniowej

Uwaga: Na styki przeka nika (beznapie ciowe) mo¿na podaæ napie cie zmienne do zasilania regulatora, pod warunkiem, ¿e nie przekroczy wartoœci 230 V AC.

RWC32 – AC 230 V supply RWC82 – AC 24 V supply



de Geräteschaltplan

G-G0:	Speisung AC 24 V
L-N	Speisung AC 230 V
M	Ground (G0) für Signaleingänge
B1	Signaleingang (Haupttemperatur)
B2:	Signaleingang (Hilfstemperatur, Fernsollwert)
Q...	Digitalausgang (unterschiedliche Spannungen zulässig)
D1:	Digitaler Eingang
GDN	Ground (G0) für digitalen Signaleingang
G0:	Ground (G0) für Signalausgänge

en Internal Diagram / Terminals

G-G0	AC 24 V supply
L-N	AC 230 V supply
M	Ground (G0) for signal inputs
B1	Signal input (main temperature)
B2	Signal input (aux. Temperature, remote setpoint)
Q...	Digital output, various voltages permissible
D1	Digital input
GDN	Ground (G0) for digital signal input
G0	Ground (G0) for signal outputs

Fr Schéma interne / bornes

G-G0	Alimentation 24 V~
L-N	Alimentation 230 V~
M	Masse (G0) pour entrées de signal
B1	Entrée de signal (température principale)
B2	Entrée de signal (température auxiliaire, consigne à distance)
Q...	Sortie numérique, différentes tensions admissibles
D1	Entrée numérique
GDN	Masse (G0) pour entrée de signal numérique
G0	Masse (G0) pour sorties de signal

it Ge

G-G0	Alimentazione 24 V AC
L-N	Alimentazione 230 V AC
M	Neutro di misura (G0) per segnali d'ingresso
B1	Segnale d'ingresso (temperatura principale)
B2	Segnale d'ingresso (aux. temperatura o potenziometro esterno)
Q...	Uscita digitale (ammesse tensioni diverse)
D1	Ingresso digitale (segnale relativo a GND)
GDN	Neutro (G0) per segnale d'ingresso digitale
G0	Neutro (G0) per segnali d'uscita

es Esquema interno / Bornas

G-G0	Alimentación 24 V CA
L-N	Alimentación 230 V CA
M	Masa (G0) para señales de entrada
B1	Señal de entrada (temperatura principal)
B2	Señal de entrada (temperatura auxiliar, consigna remota)
Q...	Salida digital, varias tensiones permitidas
D1	Entrada digital
GDN	Masa (G0) para señal de entrada digital
G0	Masa (G0) para señales de salida

pl

G-G0	Zasilanie 24 V AC
L-N	Zasilanie 230 V AC
M	Masa (G0) dla sygna³ow wejœciowych
B1	Wejœcie sygna³u (temperatura g³owna)
B2	Wejœcie sygna³u (temperatura pomocnicza, zdalna wartoœæ zadana)
Q...	Wyjœcie dwustanowe, dozwolone roŸne napie cia
D1	Wejœcie dwustanowe
GDN	Masa (G0) dla wejœcia sygna³u dwustanowego
G0	Masa (G0) dla wyjœæ sygna³ow

ch 端子 / 连接图

G – G0	AC 24 V 电源
L – N	AC 230 V 电源
M	类比输入接地线
B1	输入讯号（主温度，两个对称输入）
B2	输入讯号（辅助温度，远程设定点）
Q...	数字输出，可接通不同电压
D1	数字输入
GDN	接地 (G0) 以作数字输入
G0	接地 (G0) 以作讯息输出