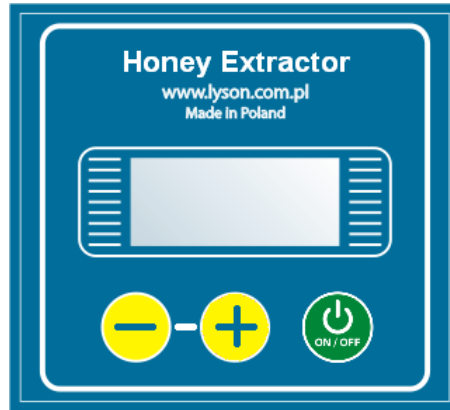
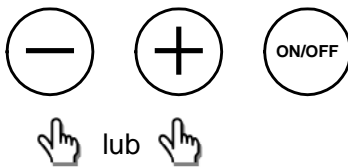
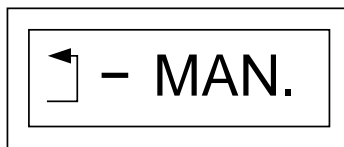
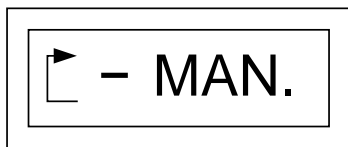


UNITATE DE CONTROL PT EXTRACTOR MIERE 12V

CENTRIFUGA REVERSIBILA

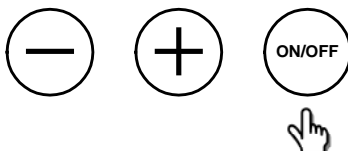
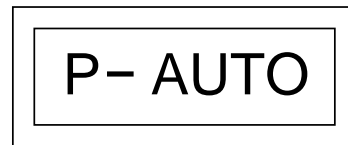
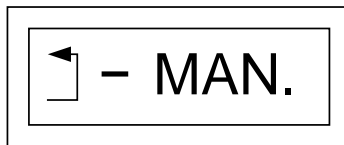
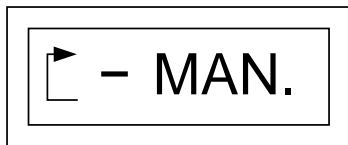


HE-01 Controller



SELECTIE MOD/ PROGRAM

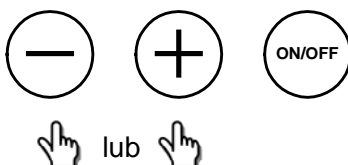
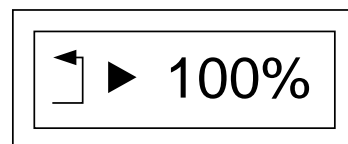
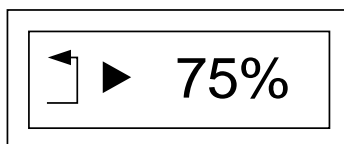
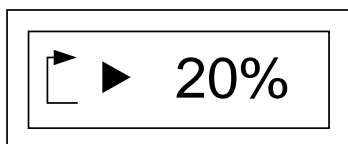
- Activ in starea OFF
- Manual (stanga sau dreapta)
- Automat (programe 1-9 si P)



MODUL MANUAL

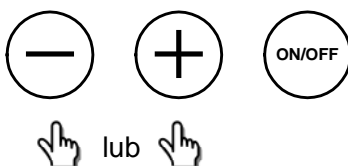
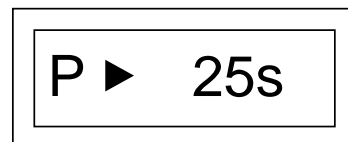
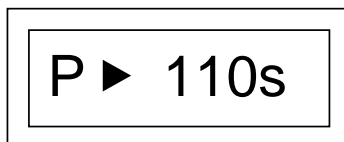
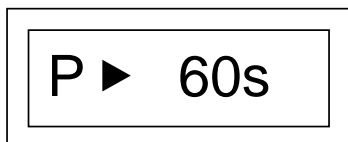
MODUL AUTOMAT

START



SCHIMBARE VITEZA DE ROTATIE

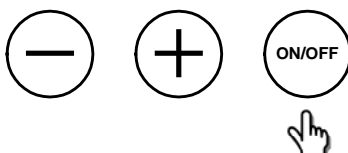
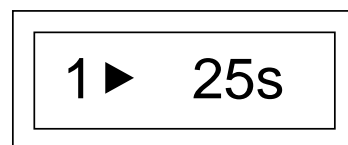
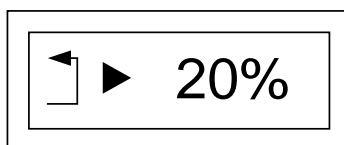
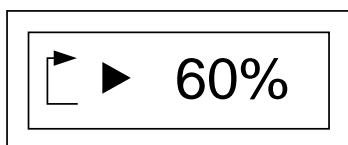
- Activ in modul manual
- Interval setare 20%-100%
- Crestere 5%



TIMPUL PANA LA SF. CICLULUI

TIMPUL DE LA INCEPUTUL CICLULUI

SCHIMBAREA METODEI DE AFISARE A TIMPULUI CICLULUI AUTOMAT



MODUL MANUAL

MODUL AUTOMAT

STOP

Programarea ciclului tehnologic

Prezenta unitate de control HE-01 permite introducerea propriului ciclu tehnologic "P-AUTO". Ciclul implementat (ca ciclurile pre-definite) constau din 4 pasi identici in ceea ce priveste durata de actiune. In plus, pasii 1 si 2 si pasii 3 si 4 sunt caracterizati de aceiasi viteza de rotatie.

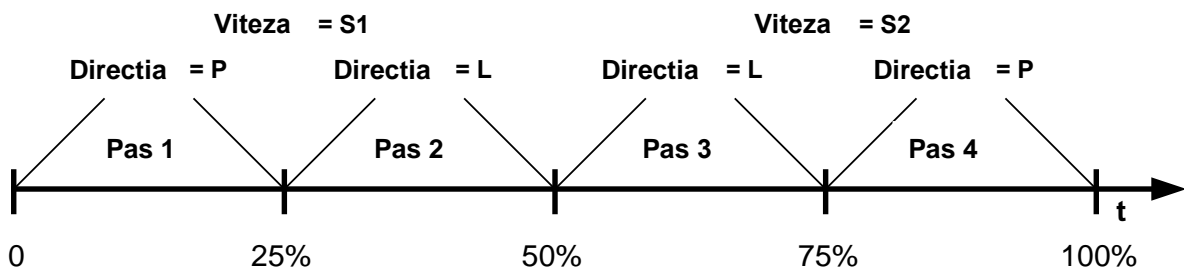


Fig 1. HE-01 Ciclul de rotie al unitatii de control (controller)

Programarea propriului ciclu este realizata din meniul de configurare si programare. Pt. a defini propriul ciclu tehnologic, ar trebui sa intrati in modul de configurare si programare mentionat.

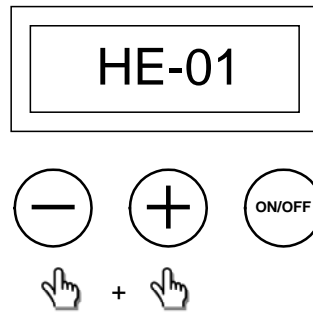


Fig 2. Intrarea in modul de configurare si programare.

Metoda de intrare in modul de programare este ilustrata in figura mai sus mentionata. Cand porniti unitatea de control, in timpul afisarii pe display a fabricantului si a tipului de dispozitiv, apasati simultan si tineti apasate butoanele **plus** si **minus**.

Sunt 2 moduri de a determina unitatea de control sa inceapa secventa- prin alimentarea cu energie sau prin ridicarea si inchiderea capacului extractorului de miere.

Butoanele Plus si **minus** ar trebui eliberate dupa ce este afisat mesajul "**Prog**". Programarea ciclului trebuie realizata conform figurilor 3-6. Setarile parametrilor sunt confirmate prin apasarea scurta a butonului **ON /OFF**. Mesajul "**OK**" semnalizeaza sfarsitul programarii - urmata de o restartare a unitatii de control.

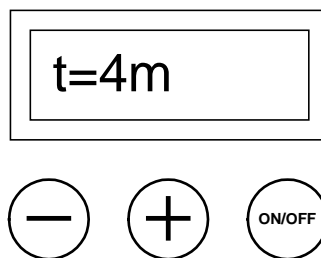


Fig 3. Programare – setarea duratei totale a ciclului (setare 3 - 15 minute). Durata fiecaruia dintre cei 4 pasi este timpul total al unui ciclu impartit la 4 , pt o setare de 4 minute, fiecare pas dureaza 1 minut.

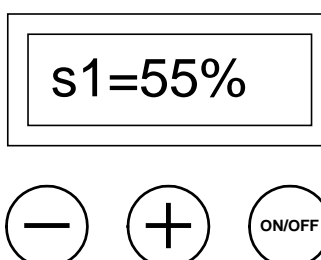


Fig 4. Programare – definirea vitezei pentru pasii 1 si 2 (setare 25% - 100%). Setarea de 100% este afisata ca maxima .

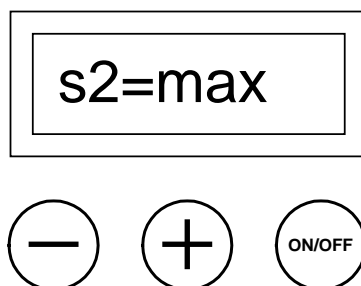


Fig 5. Programare – definirea vitezei pt pasii 3 si 4 (setare 25% - 100%). Setarea 100% este afisata ca maxim .

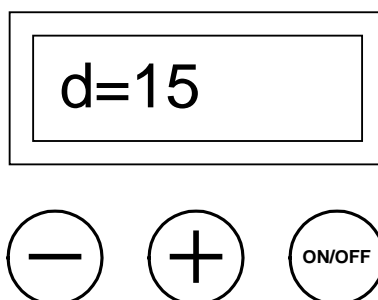


Fig 6. Programare – definirea acceleratiei motorului (setare 25% - 100%); 5 – motorul accelereaza usor , 25 –motorul accelereaza rapid. Setarea introdusa are un impact asupra dinamicii de functionare a motorului, indiferent de ciclul si modul de operare.

Cicluri tehnologice predefinite

Unitatea de control HE-01 are 9 cicluri tehnologice predefinite. Parametrii ciclurilor individuale sunt sintetizati in tabelul de mai jos. Pentru ciclul programabil (P-AUTO), tabelul de mai jos prezinta valorile prestabilite.

Ciclu	Ciclul timp / (pas timp)	Viteza pt pasii 1 si 2	Viteza pt pasii 3 si 4
1 - AUTO	3 min / (45 sec)	40%	85%
2 - AUTO	3 min 30 sec / (52.5 sec)	40%	85%
3 - AUTO	4 min / (60 sec)	50%	90%
4 - AUTO	4 min 30 sec / (67.5 sec)	50%	90%
5 - AUTO	5 min / (75 sec)	55%	95%
6 - AUTO	5 min 30 sec / (82.5 sec)	55%	95%
7 - AUTO	9 min / (135 sec)	60%	100%
8 - AUTO	9 min 45 sec / (146.2 sec)	60%	100%
9 - AUTO	10 min 30 sec / (157.5 sec)	60%	100%
P - AUTO	4 minute / (60 sec)	55%	100%

OPRIRE AUTOMATA

Unitatea de control HE-01 este prevazuta cu o functie automata de oprire- incheierea rotatiei tamburului extractor de miere. Oprirea automata permite economisirea energiei electrice si protejeaza impotriva descarcarii bateriei in cazul unui extractor lasat nesupravegheat. Functia de oprire automata opereaza pe baza unui ceas – cuantificand timpul ramas din momentul comutarii pornirii sau de la ultima apasare a butoanelor **plus** sau **minus**. Functia aceasta opereaza cand motorul este pornit si timpul de la includerea rotatiilor sau de la ultima apasare a butoanelor **plus** sau **minus** a fost de mai lung de 20 de minute.

TABELUL ERORILOR UNITATII DE CONTROL – Coduri erori

E-001

**EROARE INTERNA A MICROPROCESORULUI
UNITATII DE CONTROL**

E-002

APASARE / BLOCARE BUTON “STOP” :”

E-003

APASARE / BLOCARE BUTON “MINUS”

E-004

APASARE / BLOCARE BUTON “PLUS”