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TECHNICAL MEASURES FOR ENERGY SAVING IN THE DEVICE YOU HAVE ASYNCHRONOUS MOTORS, USE OF THE FEED IN AGRICULTURAL ENTERPRISE GRIN

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Key words: *the capacity to koeffisienti ED, active, full of energy and reactive energy downloads koeffisientic, powerI by the number of pairs of poles of the gardenof liq methods.*

Agricultural enterprises of electrical energy is the main iste'molchi the feed of the crushing device asinxron electric engines is, approximately three quarters of the electric energy produced in part iste'makes cost. This electric enginesIsee the main part consists of asinxron engines. The simplicity of this design, cheap, reliability at work are being widely used in[19].

All agricultural enterprises in the crushing of the feed device tthat is not fully available due to technology a'mirlash asinxron working mode of the motor parameters that can be observed in accordance with the parameters of the passport had not come. Used by agricultural enterprisessinxron m electrichorseIwere going to decrease because energy indicators in the enterprise has a significant impact on the amount of waste.

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Fig.1- General view of the device feed crushing

Feed the crushing device asinxron t enginesa'mirdan then the main motor of the wrong packaging defects chulg'am is wrong or knowan associatedtrack can be spotted. Feed the crushing device texnologik in the process ofthe improvement of the side directly to the electric managementto improve come associated withis[2-17]. Feed the crushing device used in agricultural enterprises usingsinxron eon the other side of the engines in use not only downloads I valueand work to see you need to give a mode, but also the symmetry of the phase give his attention should be. This symmetry exceed 15% iste'molchi it is recommended to transfer from one phase to the other phase. Feed used in the device by a crushingsinxron engines repair from the next track which is the main defects we will consider[1-15].

A device used in the crushing of the feed in agricultural enterprises bysinxron electric motorits nest chulg'am theoption to repairIfrom the chulg'am afterIsurrounded the right to confirming testsshould work. You this feed crushing device asinxron mhorseI fall to infer if the noise or work, in general, usually bogged down in one phase or two phase bogged down in some condition is observed. You feed the crushing device asinxron mhorseI or if the noise has become out of bad, usually chulg'am one phase and the beginning of the end will share. Thus, the work is also in the salt of the vine is older than the nominal value. The following scheme is determined directly from the beginning and end of chulg'am. These 6 are often performances asinxron engines is observed. A device used to feed the crushingsinxron mhorseI be harvested after repairing the great vine, the blow-out of touch from the stator can be generated also.

Feed the crushing device used in agricultural enterprises usingsinxron electric mhorseI heated in the following cases.

-when the nominal voltage is large or small;

-download very ventilation when someone breaks;

-“stars” instead of “triangular” when they connect;

-korpusga when smoking or inter-phase qis theqof a circuit is when.

The adjacent chains break off short when asinxron engine heats up, the noise is out of tremble, the bad launch can't get it out to the nominal speed.

Feed used in the device by a crushingsinxron electric mhorse the following cases tremble in:

when the arrow is on the blow-out muvozanatlanmagan, sterjenlar plucked the ring cut off when a short circuit is when. Feed used in the device by a crushingsinxron electric mhorseI shook when cut off from the network to lose the magnetic pull to one side shows that there are. Crushing by agricultural enterprises in the device used in the feed motor asinxronproducts on a periodic basis for preventive trials must pass[3-17]. Feed used in the device by a crushingsinxron in the process of the operation of engines at a certain period, usually once a year operation tests are conducted. The purpose of this test the crushing of the feed device asinxron motorIs tekshirish is. In addition to these trials more special testing and research are conducted. Check that respond to special conditions and special requirements test.

Of the test is the first point of the insulator korpusga than a solid test. Insulator resistance 220/350 v li asinxron engines 500 v li megometr with measured500 v large voltage asinxron engines 1000 v li megometr with measured[3-17]. Measuring at least 2 times the vine of the direction changing is carried out. You the results of a kind is an insulator normal position. Otherwise without insulator wetgreenhouses or powder pressing is. Working temperature asinxron electric engine insulator, the resistance of the following values than less be should.

$$r = \frac{U}{1000 + 0{,}01 \cdot P}\,[Мом], \qquad (1)$$

bit is here;

It – nominal voltage, V;

R – the machine nominal power, kw.

That in addition to insulator resistance all without mom than 0.5 less be should. Insulator resistance cold chulg'am in that case, the external environment temperature $\pm 3^0$ less difference than when held[17]. Simple bridge or bridge is held by ikkila resistance in the scheme in the

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scheme. Ampermetr method is more accurate and will respond to the demand voltmetr. She should be conducted on the basis of the following requirements:

1. The measured resistance should be connected directly to output voltmetr;
2. Opened kontaktlir possible as not to be should;
3. Permanent shock of the source as well charged akkumlyator battery be should;
4. Measuring instruments, indicators, particular kpreparations transmission with be taken should;
5. Each of the resistance of a few of the vine in the value of large value from the smaller value , depending on changed to be a must;
6. The instrument branchof ala border change;
7. Measurement tools to fix their koeffisienti into account get.

Thus, the resistance as follows is determined:

$$r = \frac{U}{I}[ом] \quad . \qquad (2)$$

Voltmetr resistance into account when taking:

$$r = \frac{U}{I - \frac{U}{r_B}} \quad . \qquad (3)$$

Chulg'am insulator korpusga than a solid following voltage checked:

$$U_C = U_H + 1000B\,, \qquad (4)$$

here;

U_H -nominal motor voltage, V.

Roll-of-the solid insulator 30% from the nominal voltage of the high voltage is held at 5 min[2-10]. E asinxronon the other side engineused in nagruzka heated to a nominal checked. Thus, we can determine the stable temperature, the ambient temperature is determined from the difference. This is to try about 2-8 hours around is held. Every 30 minutes the temperature is measured. The temperature of the thermometer method or resistance method is held[1-15]. The thermometer method directly on the thermometer measured into the part is put [3-7].

Resistance method, the temperature is indirectly measured and izolyasiyalangan in chulg'am is used[1–16]. The temperature of the cold chulg'am condition v_c and resistance of

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r_c character, considering that, when heated its temperature $v_к$ resistance and the $r_к$ system is found through withdrawals following equations[17]:

$$r_c = r_{15}\left[1+\alpha\left(v_c - 15\right)\right]$$
$$r_к = r_{15}\left[1+\alpha\left(v_к - 15\right)\right] \quad (5)$$

b:there

$$v_К = \frac{r_К}{r_C}\left(235+v_C\right)-235 \quad (6)$$

The more accurate result can be obtained from the following expression:

$$v_к = v = \frac{r_к - r_c}{r_c}\left(235+v_c\right)+v_c \,. (7)$$

You cold temperature +15$^{to\,0}$ if we haveit without the temperature difference:

$$\Delta v = v_к - v_o = 250\,\frac{r_к - r_c}{r_{15}} + 15 - v_o \,. \quad (8)$$

This formula 235 instead of 245 and 250 instead of 260 we have written aluminum the chulg'am for future support will be[3]. Due to the measure certainly one instrument with be conducted should. Also using the preset temperature is measured using the indicator and indicator mounted during the test [8].

Feed the crushing device used in agricultural enterprises asinxron using electric engines bring the following energy saving measures asimiz can:

- feed the crushing device asinxron electric motoraccounted for its capacity to a reasonable selection;

- feed the crushing device energygetik indicators are high asinxron electric motor to replace;

- feed the crushing device salt to work mode limit and work process intensifikasiyalash;

- feed the crushing device of electric energy quality indicators adjust;

- feed the crushing device asinxron the electric engine to the optimum working mode to hold the stand;

- feed the crushing device downloadscrelated to asinxron electric motor connection scheme of the change;

- feed the crushing device on technological requirements asinxron adjust the motor speed;

- feed the crushing device downloads muvofiq asinxron adjust motor energy consumption;

- feed the crushing device asinxron electric engines reactive power cover.

E in agricultural enterpriseson the other side of the repair of electrical equipment reducing the waste of energy can be achieved by improving the quality of[12]. This event, especially the crushing of the feed device asinxron enginesIrepair it gives a good effect. Thus,in addition to n after the repair, the crushing of the feed device asinxron motors passport should draw prametrlarga parameters[13]. Poor-quality repairs out of asinxron a lot of reactive power engines iste'cost, the symmetry of chulg'am be increased waste due to the departure of the vine produces salt of work. Such negative circumstances asinxron chulg'am other large motor large nominal (at nominal speed, voltage and frequency changes when re-packaging required to perform additional calculations[9]. However, often, with the information given in the table kayta o'ralaveradi example. Most of these events are primarily associated with the event include the replacement of the power supply system elements[8]. Agricultural enterprisesof the worldin the crushing feeding device kuploaded at asinxron enginesIsee replacement, FIK effective modern equipment to replace equipment that is low, and the incisions to change the surface of the network voltage, reactive power to compensate the electric energy saving measures.

Conclusion: it can be said that the possibilities of energy saving of asynchronous motors used in feed grinding enterprises used in agricultural enterprises were calculated and analyzed based on energy balances, indicators of the efficiency of electricity use in asynchronous motors. As a result of the analysis, the need to compensate for reactive power at the enterprise was determined.

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